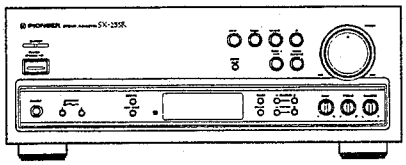
Service Manual

PIONEER®
The Art of Entertainment



STEREO RECEIVER

SX-255R
SX-205

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model		Power Requirement	The voltage can be converted by the following method.
	SX-255R	SX-205		
KUXJ	○	○	AC120V	————
KCXJ	○	—	AC120V	————
SDXJ	—	○	AC110V/120–127V/230V/240V	With the voltage selector
YPWXJ	○	—	AC240V	————

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O-DFG JAN. 1996 Printed in Japan

1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

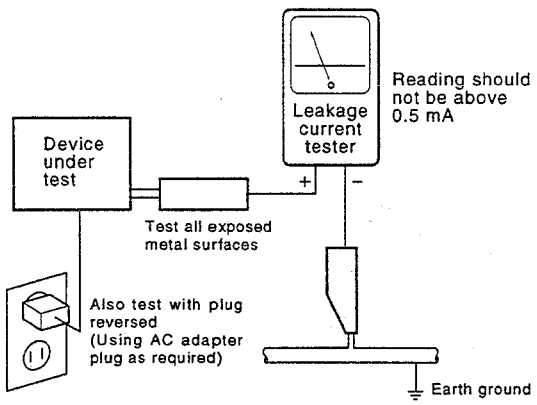
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.


Reading should not be above 0.5 mA
Leakage current tester
Device under test
+
−
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage , etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. CHECKING FOR PCB PATTERN OF MOTHER ASSY

1. Remove lower set screw ① at the center of the Chassis and Rear Panel.
2. Cut binder ② and remove.
3. Remove the three screws ③ fastening the MOTHER Assy, and the two screws ④ fastening the Radiator.
4. Grip the Radiator and Rear Panel, and lift up about 3 cm. Then, lift up the MOTHER Assy as shown in Fig. 2 so that it can be checked.

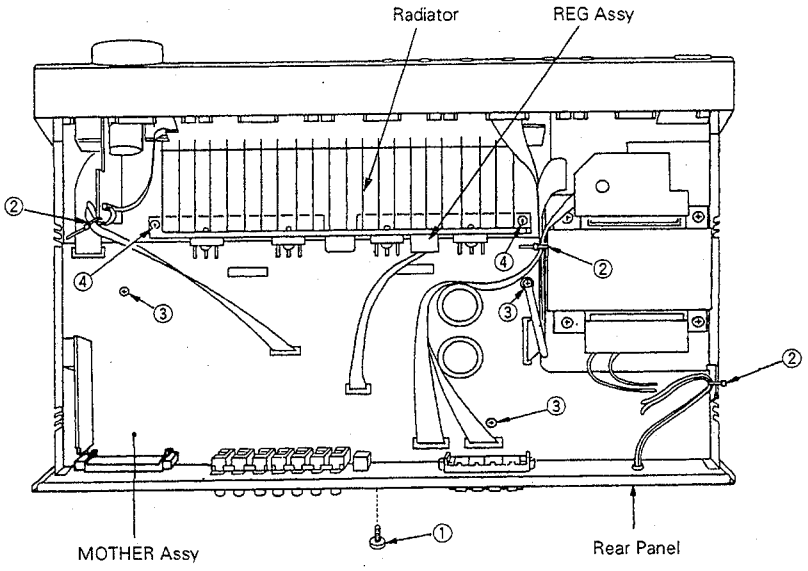


Fig. 1

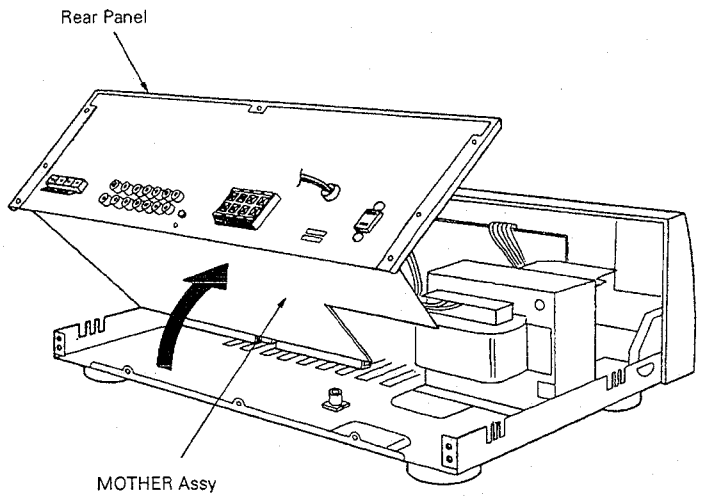


Fig. 2

3. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES :

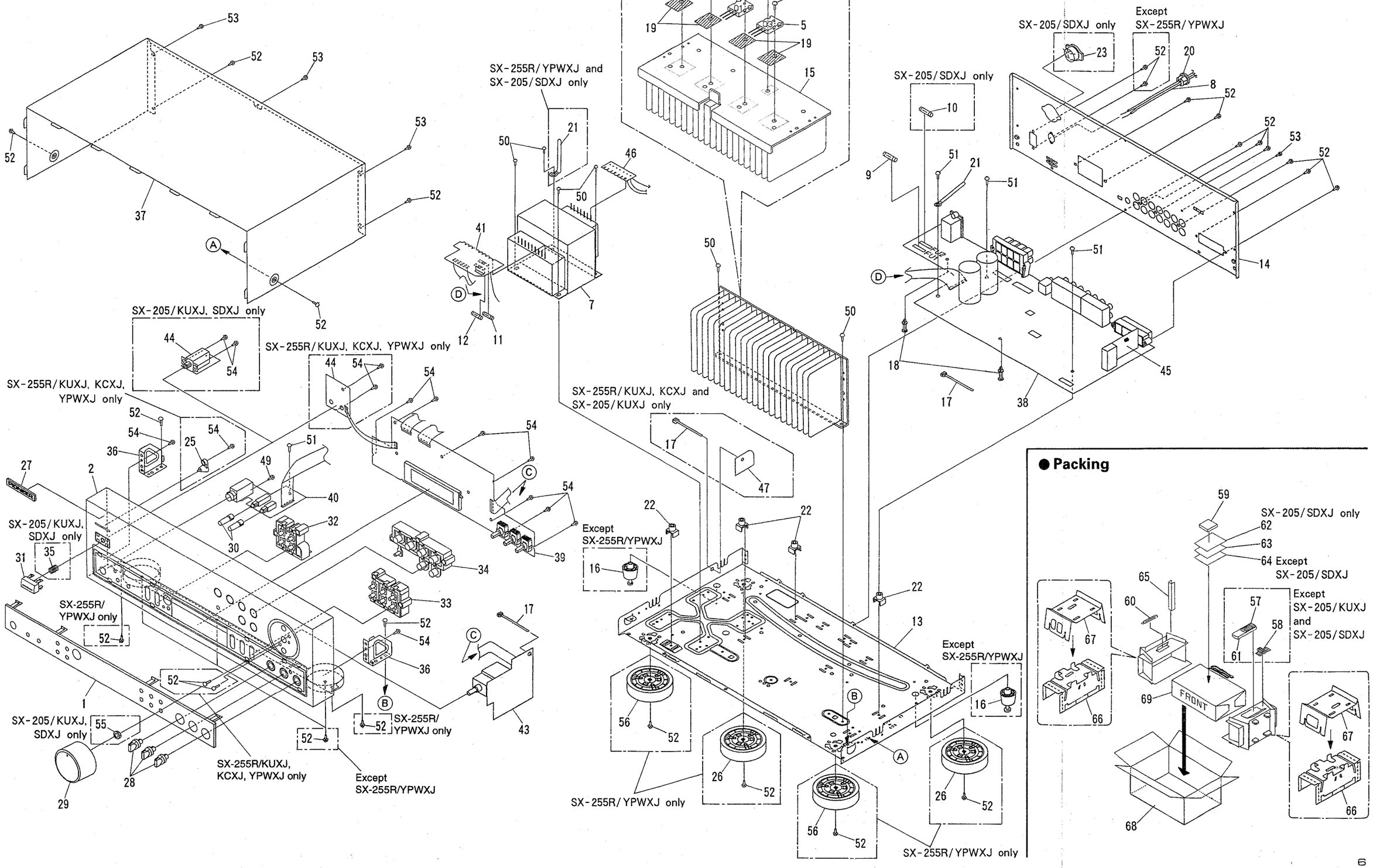
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts List of Exterior and Packing (For SX-255R/KUXJ)

Mark	No.	Description	Parts No.
	1	FL Panel	AAK7239
	2	Front Panel	AMB7331
⚠	3	Transistor (Q1)	2SC5200
⚠	4	Transistor (Q2)	2SC5200
⚠	5	Transistor (Q3)	2SA1943
⚠	6	Transistor (Q4)	2SA1943
⚠	7	Power Transformer (T1)	ATS7114
⚠	8	AC Power Cord	PDG1015
⚠	9	Fuse (6.3A, FU1)	REK1085
	10	.....	
⚠	11	Fuse (1A, FU3)	REK1075
⚠	12	Fuse (1A, FU4)	REK1075
NSP	13	Chassis	ANA1228
	14	Rear Panel	ANC7339
NSP	15	Radiator	ANH1458
	16	Foot	AEC1505
NSP	17	Binder	ZCA-BK1
	18	PCB Support	AEC1581
	19	Mica Sheet	AEE1014
	20	Strain Relief	CM-22C
NSP	21	Binder	RNE1277
	22	PCB Mold	AMR2533
	23	.....	
	24	.....	
	25	LED Lens	AAK2553
	26	.....	
	27	Name Plate	PAM1608
	28	Round Knob S	AAB7083
	29	Round Knob L	AAB7082
	30	Push Button	AAD7282
	31	Power Button	AAD2531
	32	Hinge Button A	AAD7279
	33	Hinge Button B	AAD7280
	34	Function Button	AAD7281
	35	.....	
	36	Panel Holder	ANG7087
	37	Bonnet Case	ANE7109
	38	MOTHER Assy	AWZ8086
	39	FL AND UCOM Assy	AWZ8090
	40	SP SW. AND HP. Assy	AWZ8096
	41	TRANS Assy	AWZ8097
	42	REG Assy	AWZ8389
	43	VOL. Assy	AWZ8092
	44	POWER SW. Assy	AWZ8094
	45	FM/AM TUNER FE MODULE	AXQ1002
NSP	46	PRIMARY Assy	AWZ8369
NSP	47	BARRIER Assy	AWZ8371
	48	Screw (3×14)	ABA1194
	49	Screw	ABA7009
	50	Screw (3×8)	ABA7019
	51	Screw	BBZ30P200FMC
	52	Screw	BBZ30P080FZK
	53	Screw	BCZ30P080FZK
	54	Screw	BPZ26P080FMC
	55	.....	
	56	.....	
	57	Remote Control Unit (CU-SX108)	AXD7085
NSP	58	Battery (R6P, AA)	VEM-013
	59	Loop Antenna	ATB7004
	60	FM Antenna	ADH1017
	61	Battery Cover	AZA7123
	62	.....	
	63	Operating Instructions (English)	ARB7064
NSP	64	Warranty Card	ARY1051
	65	Sub Pad	AHA7051
	66	Pad Side (A)	AHA7121
	67	Pad Side (B)	AHA7122
	68	Packing Case	AHD7265
	69	Packing Sheet	AHG7026

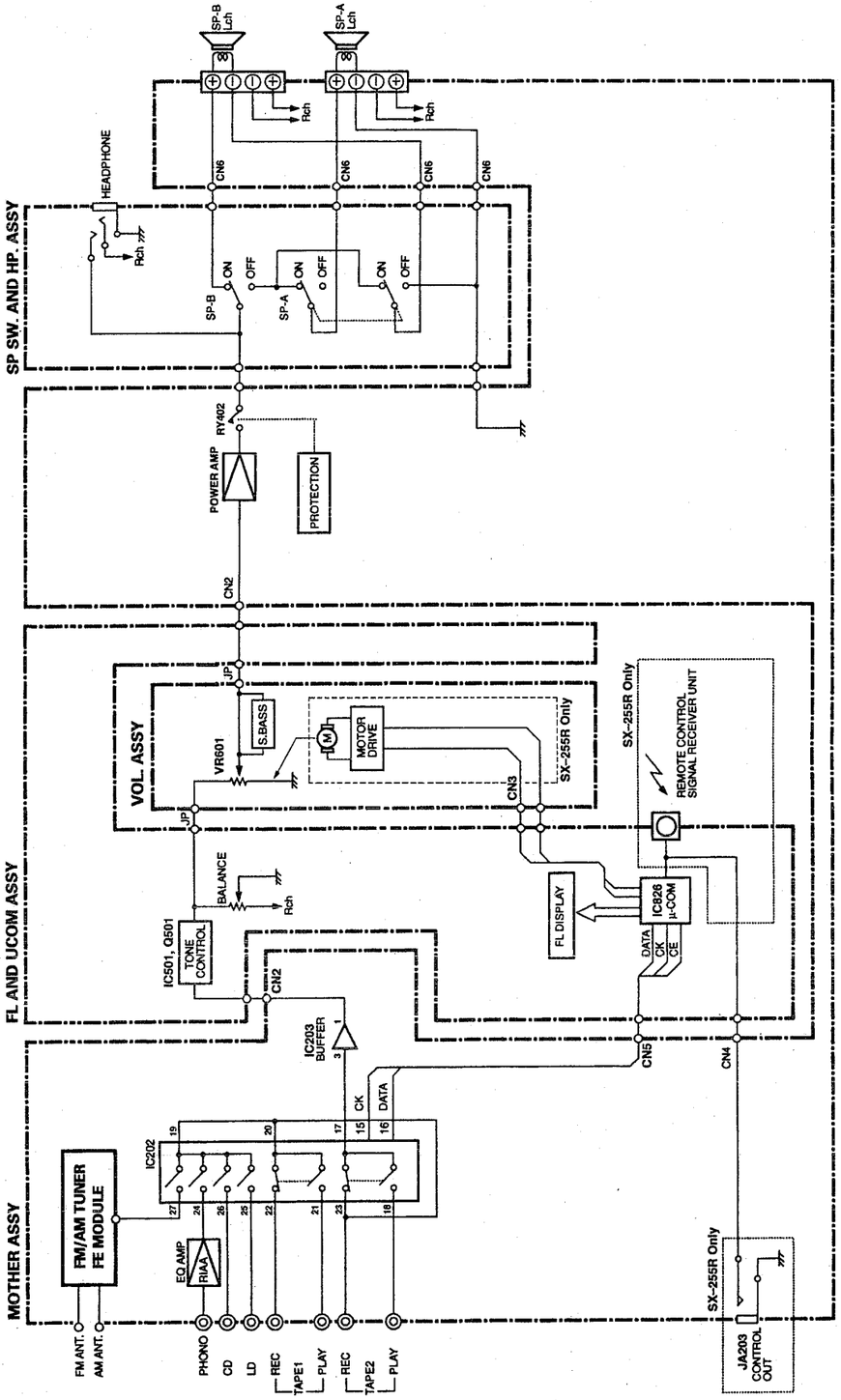
● Exterior

NOTE : Screws adjacent to ▼ mark on the product are used for disassembly.



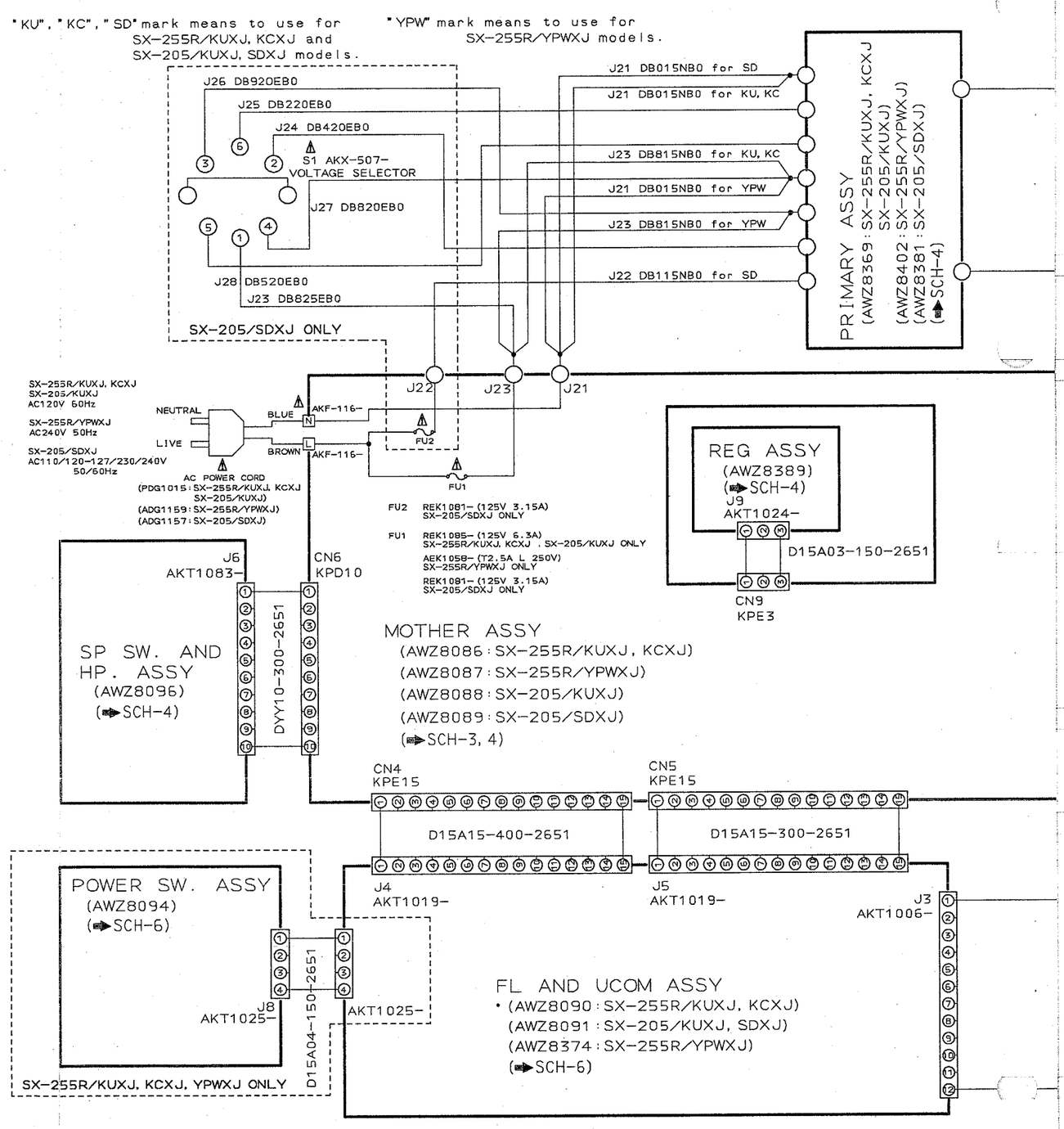
● Packing

4. BLOCK DIAGRAM

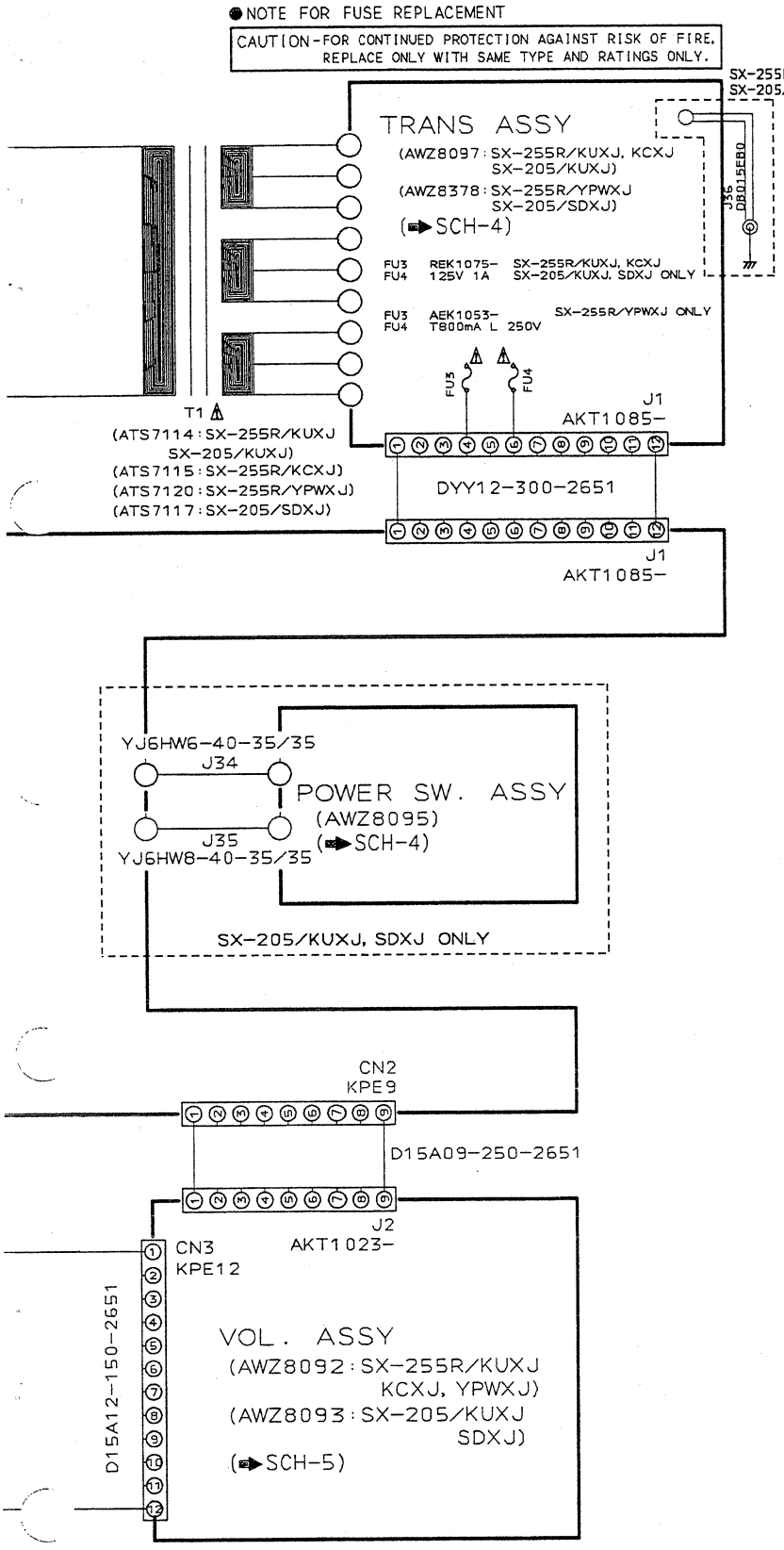


5. SCHEMATIC AND PCB CONNECTION DIAGRAMS

5.1 OVERALL SCHEMATIC DIAGRAM



SCH-1 OVERALL SCHEMATIC DIAGRAM



NOTE FOR SCHEMATIC DIAGRAMS (TYPE 1A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or μF unless otherwise noted.
   Ratings: capacitor (μF) / voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electolytic capacitors.
5. **COILS:**
   Unit: m:mH or μH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   ▭V : SIGNAL voltage at rated output.
   ▽ or ←V :
   DC voltage (V) at no input signal unless otherwise noted.
   Value in ( ) is DC voltage at rated power.
   ⇦ mA or ←mA :
   DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ⊘ or ● : Adjusting point.
   - ◀ : Measurement point.
   - The ⚠ mark found on some components parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH-□ ON THE SCHEMATIC DIAGRAM:**
   - SCH-□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position):

Voltage Selector (SX-205/SDXJ only)
AC110V/120-127V/230V/240V

MOTHER Assy
S401 9k/10k (SX-205/SDXJ only)

FL AND UCOM ASSY
S826 STATION UP
S827 STATION DOWN
S828 CLASS
S829 MPX MODE
S830 FREQUENCY UP
S831 FREQUENCY DOWN
S832 BAND
S833 PHONO
S834 TAPE 2
S835 TAPE 1/VCR
S836 S. BASS
S837 MEMORY
S838 CD
S839 LD/DVD
S840 TUNER

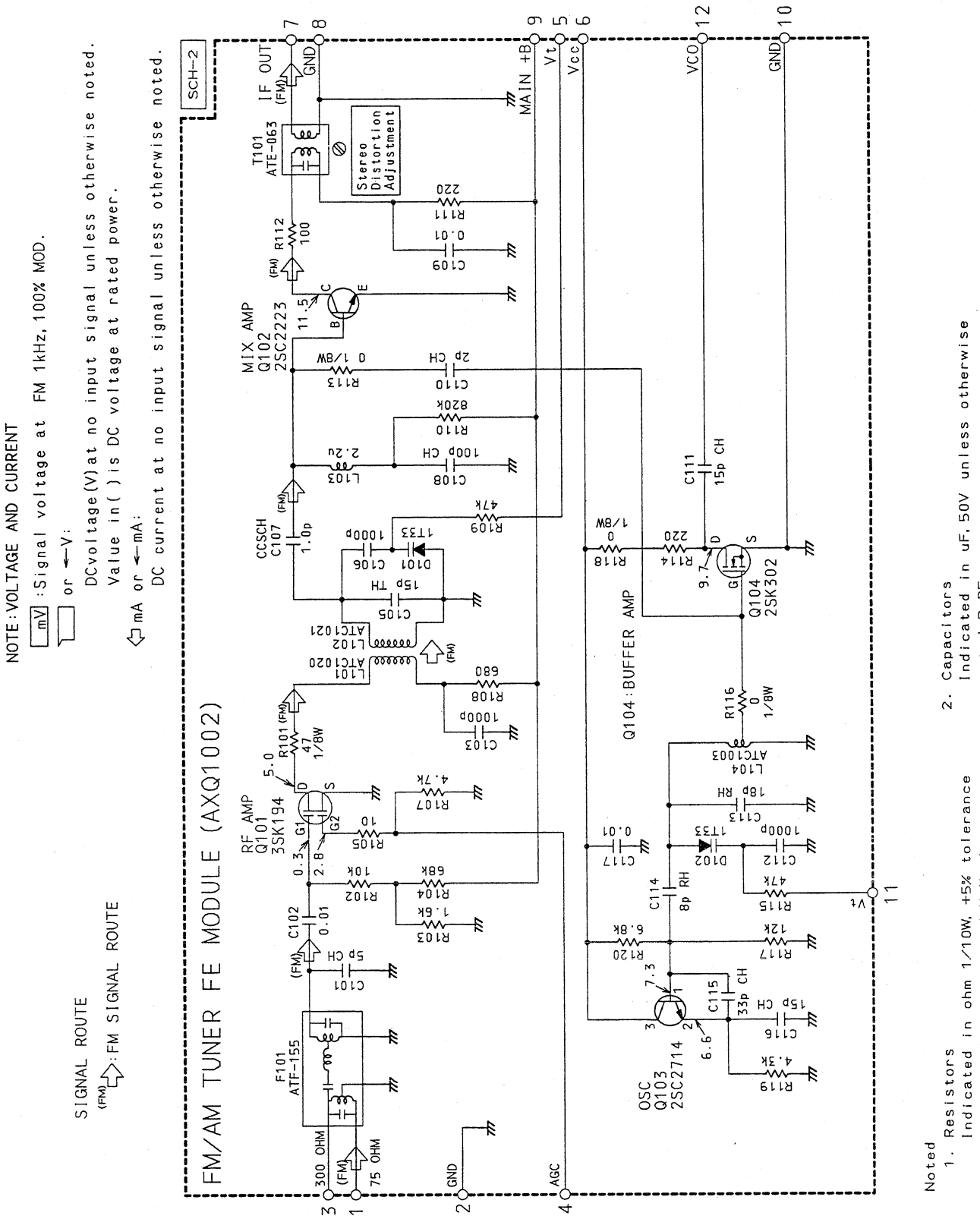
POWER SW. Assy
S876 POWER STANDBY/ON (for SX-255R)
S401 POWER (for SX-205)

SP SW. AND HP. Assy
S701 SPEAKER A ON/OFF
S702 SPEAKER B ON/OFF

OVERALL SCHEMATIC DIAGRAM **SCH-1**

5.2 MOTHER ASSY, FM/AM TUNER FE MODULE, SP SW. AND HP. ASSY, TRANS ASSY, REG ASSY AND POWER SW. ASSY (for SX-205)

● FM/AM TUNER FE MODULE



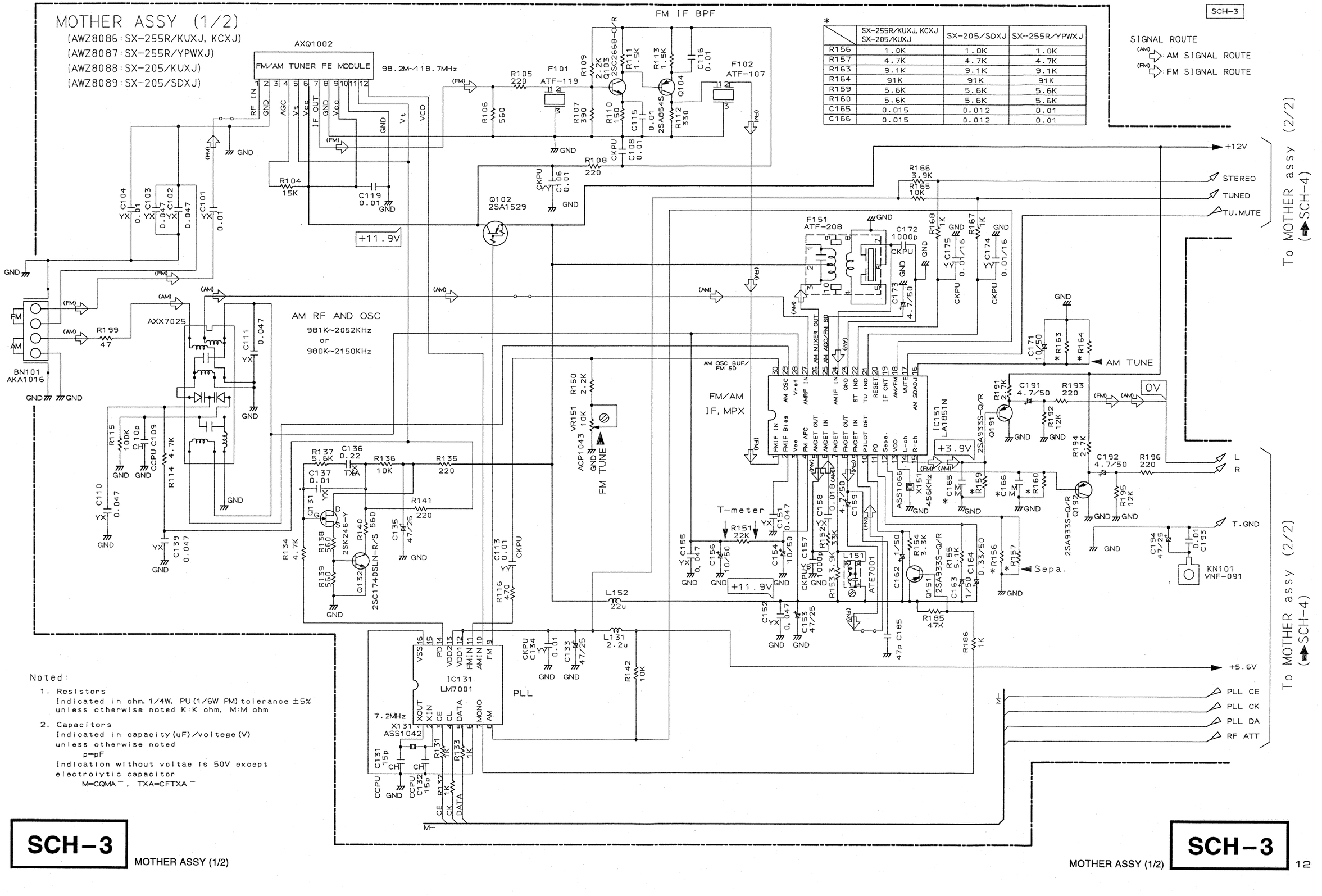
Noted

1. Resistors
Indicated in ohm 1/10W, +5% tolerance unless otherwise noted K:K ohm.

2. Capacitors
Indicated in uF, 50V unless otherwise noted P:PF.

SCH-2 FM/AM TUNER FE MODULE

● MOTHER Assy (1/2)

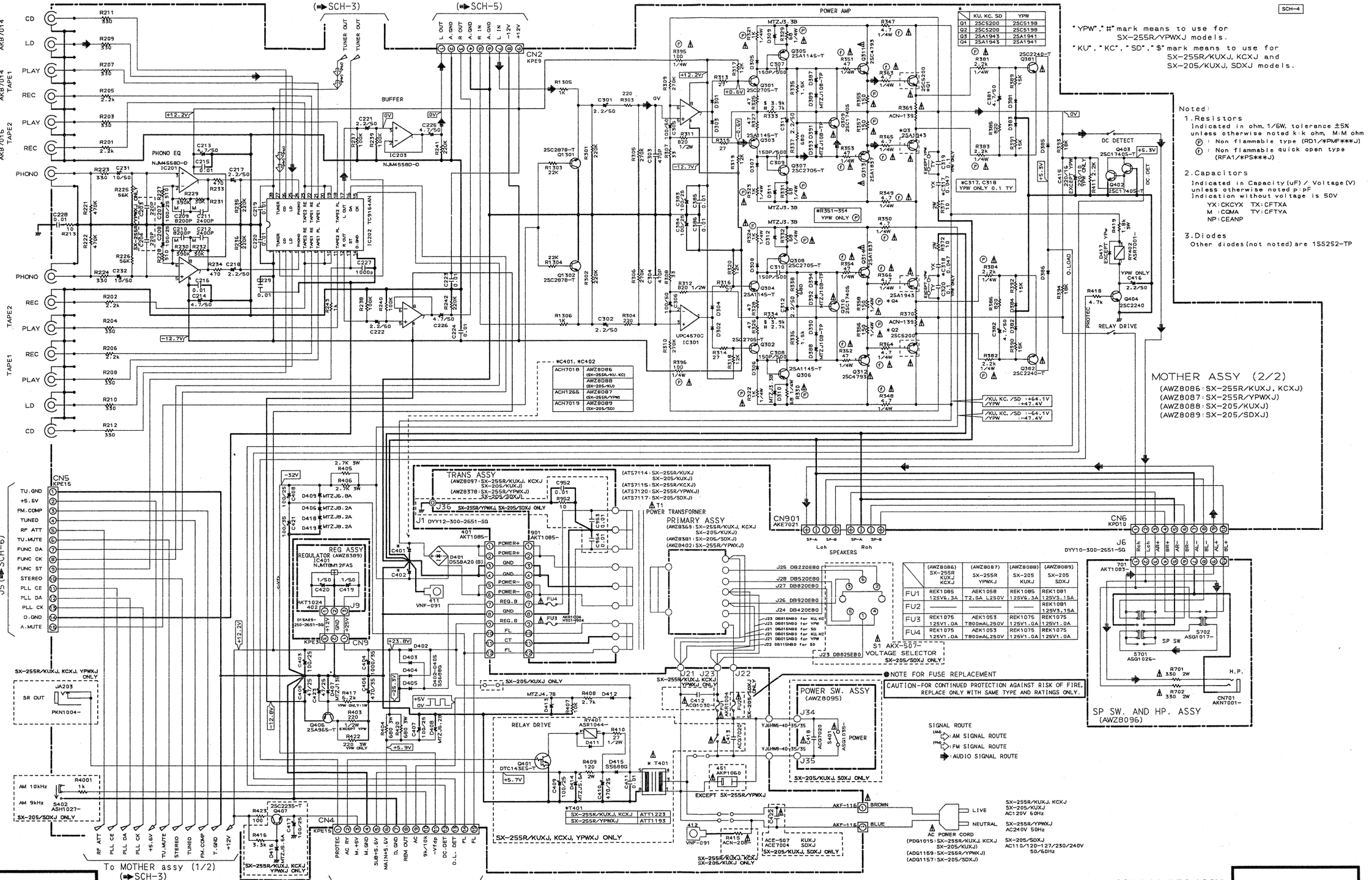


*

	SX-255R/KUXJ, KCXJ SX-205/KUXJ	SX-205/SDXJ	SX-255R/YPWXJ
R156	1.0K	1.0K	1.0K
R157	4.7K	4.7K	4.7K
R163	9.1K	9.1K	9.1K
R164	91K	91K	91K
R159	5.6K	5.6K	5.6K
R160	5.6K	5.6K	5.6K
C165	0.015	0.012	0.01
C166	0.015	0.012	0.01

SX-255R, SX-205

● MOTHER Assy (2/2), SP SW. AND HP. Assy, TRANS Assy, REG Assy and POWER SW. Assy (for SX-205)

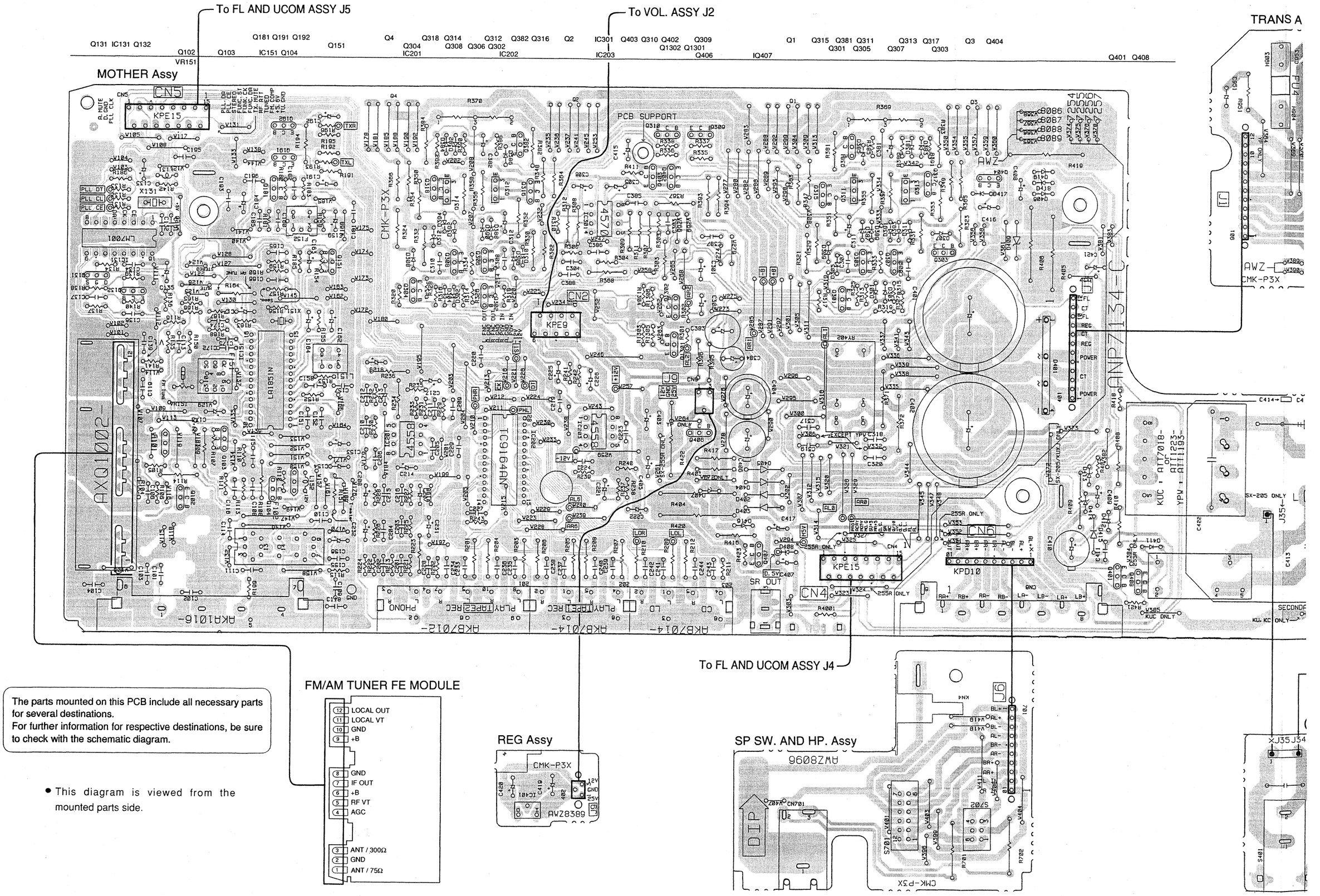


SCH−4

MOTHER ASSY (2/2), REG ASSY, SP SW. AND HP. ASSY, POWER SW. ASSY (for SX-205)

MOTHER ASSY (2/2), REG ASSY, SP SW. AND HP. ASSY, POWER SW. ASSY (for SX-205)

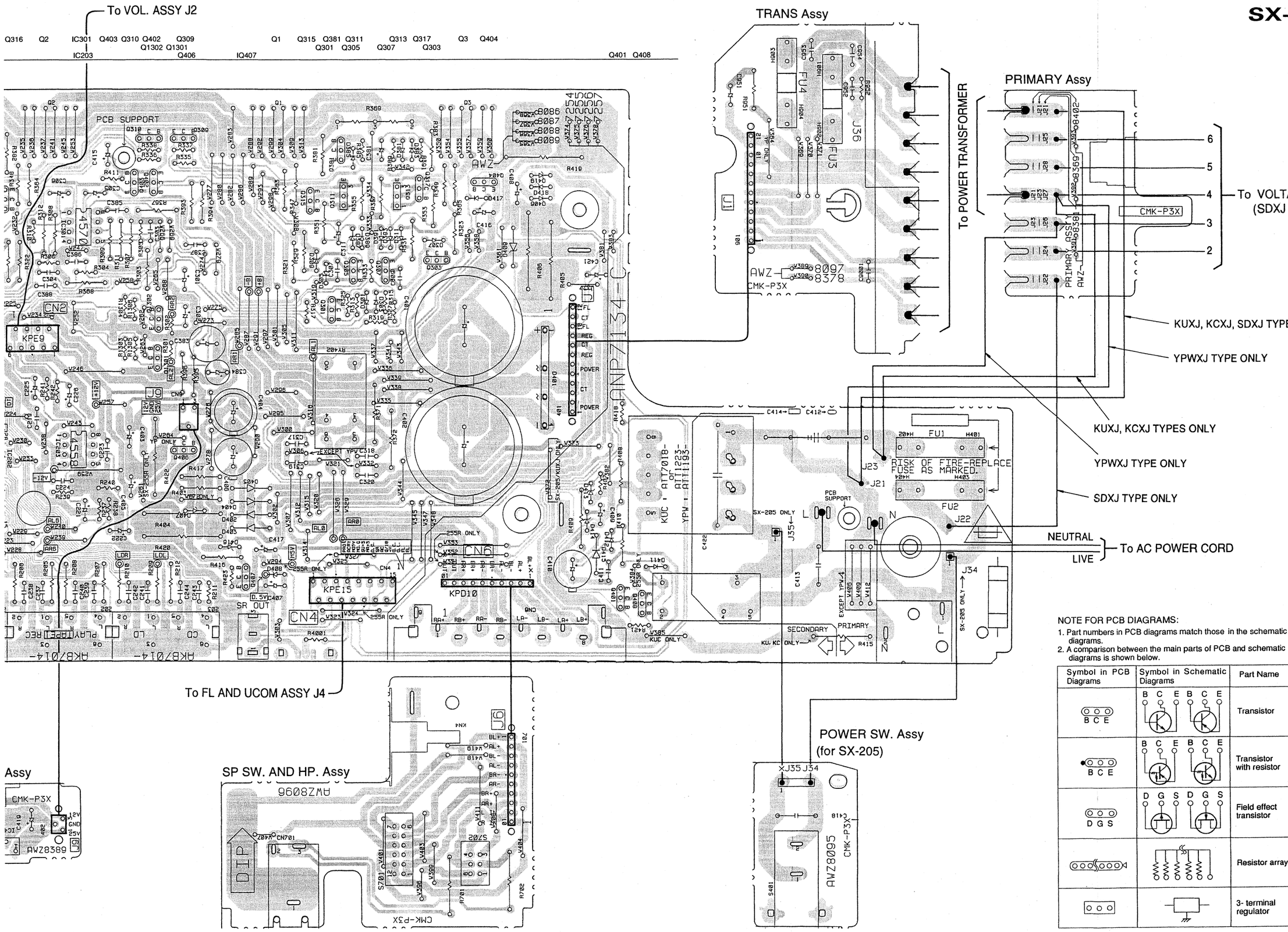
SCH−4



The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

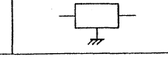
- This diagram is viewed from the mounted parts side.

PCB–1



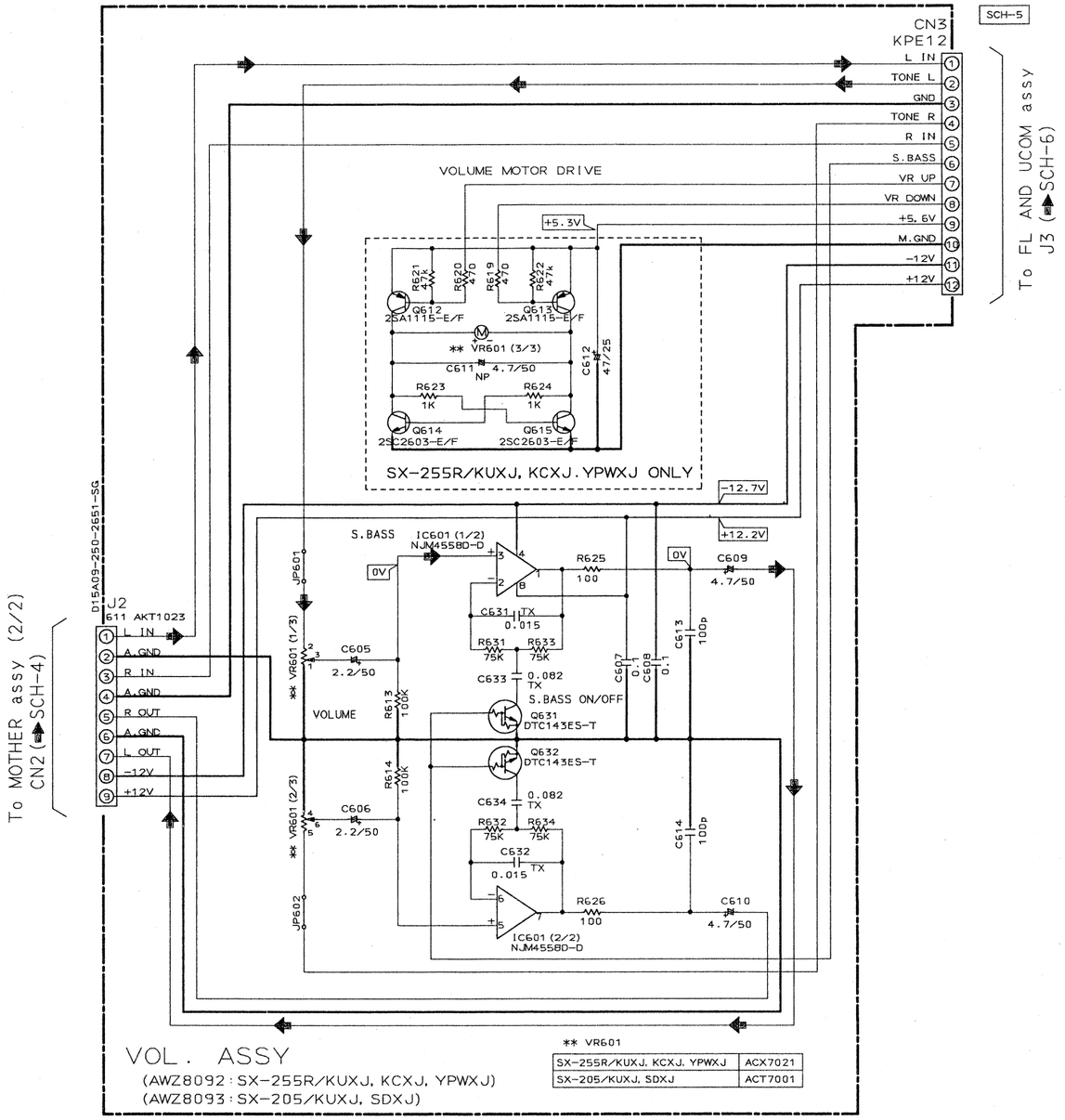
NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3- terminal regulator

5.3 VOL. ASSY, FL AND UCOM ASSY AND POWER SW. ASSY (for SX-255R)

● VOL. Assy



Noted:

1. Resistores
   Indicated in ohm, 1/6W, tolerance ±5%
   unless otherwise noted k:k ohm, M:M ohm

2. Capacitors
   Indicated in Capacity(uF) / Voltage(V)
   unless otherwise noted p:pF
   Indication without voltage is 50V
   M : ECMA
   NP : CEANP
   TX : CFTXA

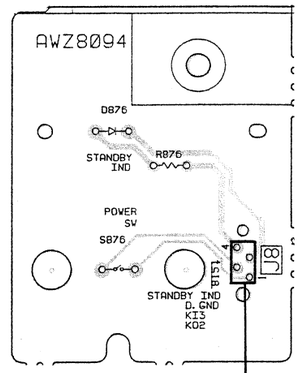
SIGNAL ROUTE

▲▼: AUDIO SIGNAL ROUTE

SCH-5

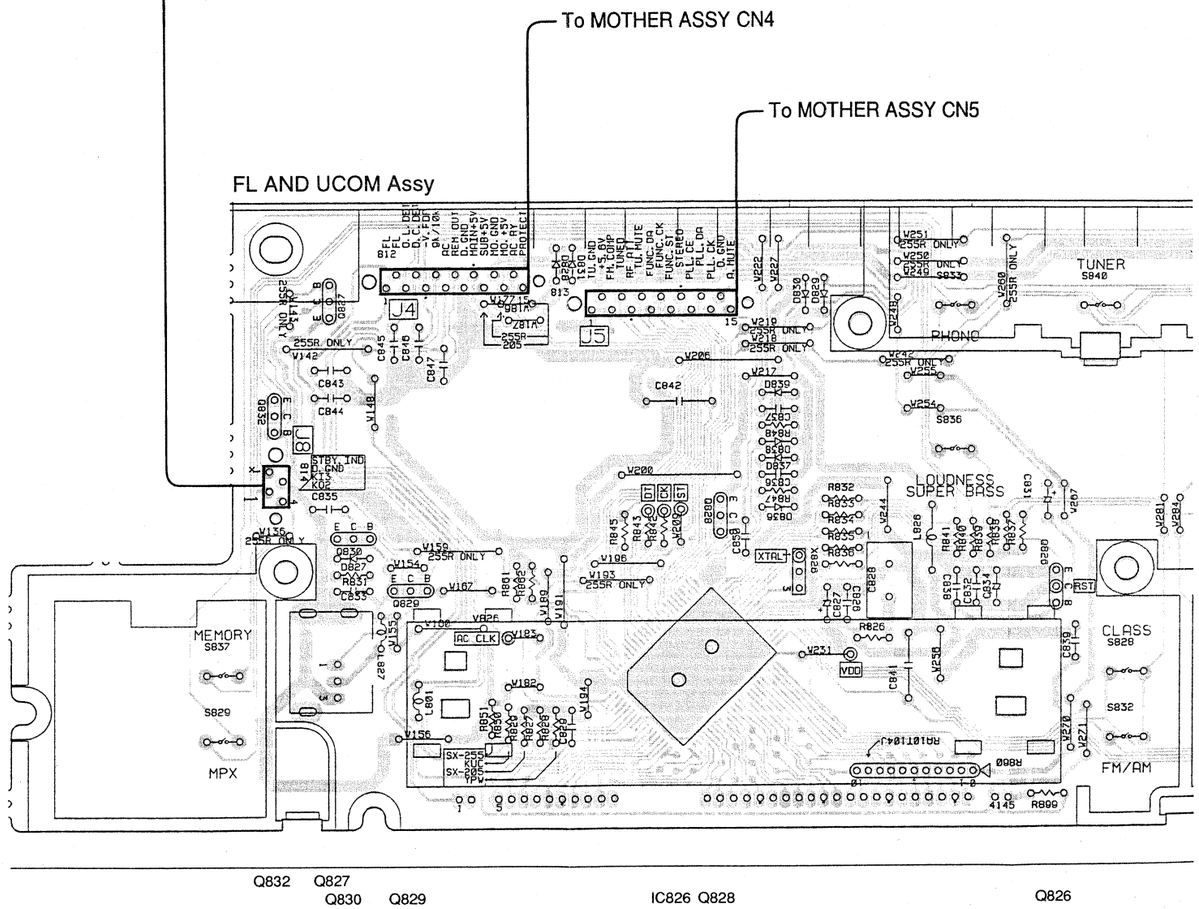
VOL. ASSY

POWER SW. Assy (for SX-255R)



- This diagram is viewed from the mounted parts side.

The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.



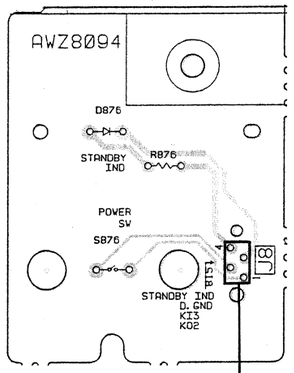
R)

SCH-5

To FL AND UCOM assy J3 (▲SCH-6)

PCB－2

POWER SW. Assy (for SX-255R)



- This diagram is viewed from the mounted parts side.

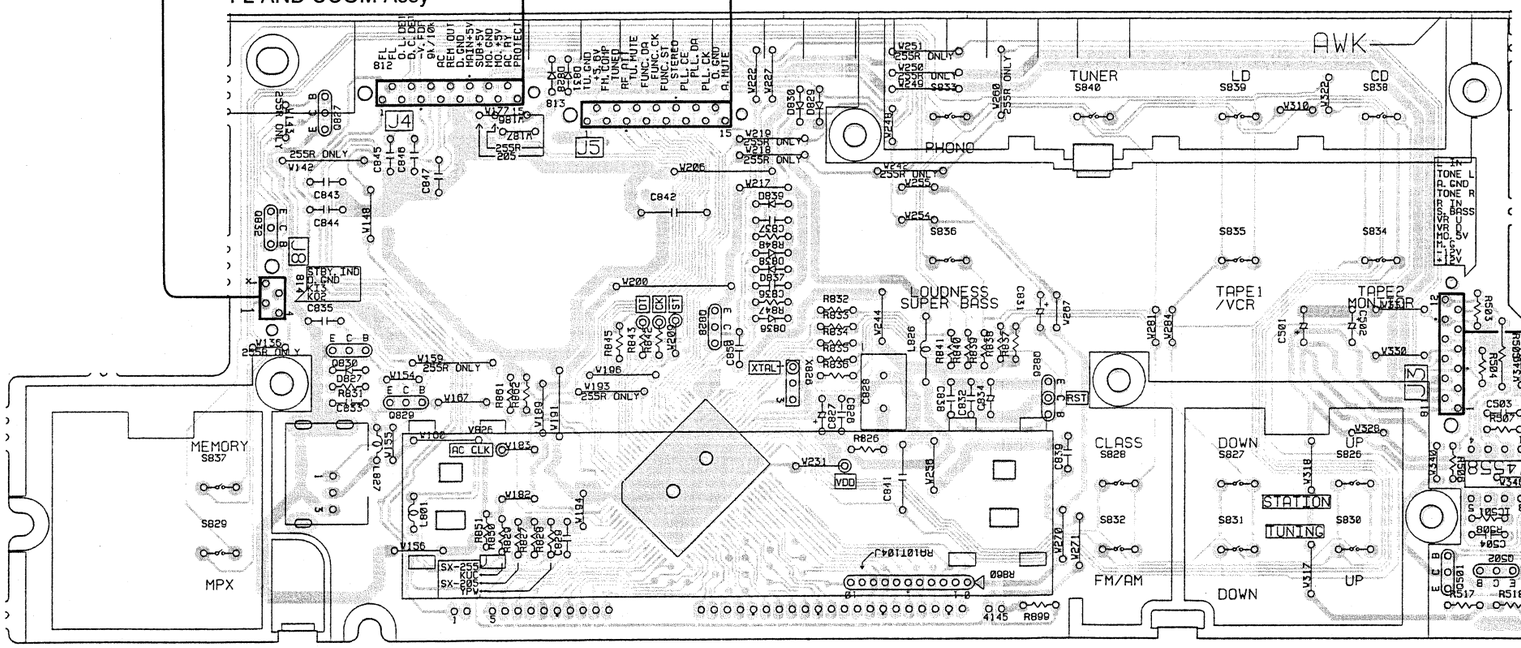
The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

To MOTHER ASSY CN2

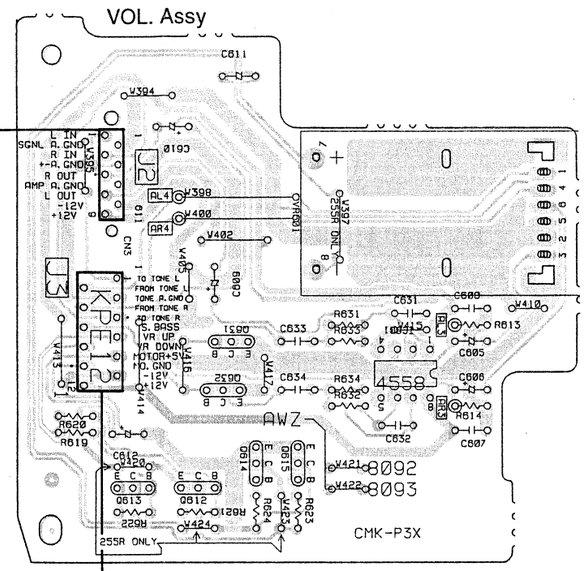
To MOTHER ASSY CN4

To MOTHER ASSY CN5

FL AND UCOM Assy



VOL. Assy

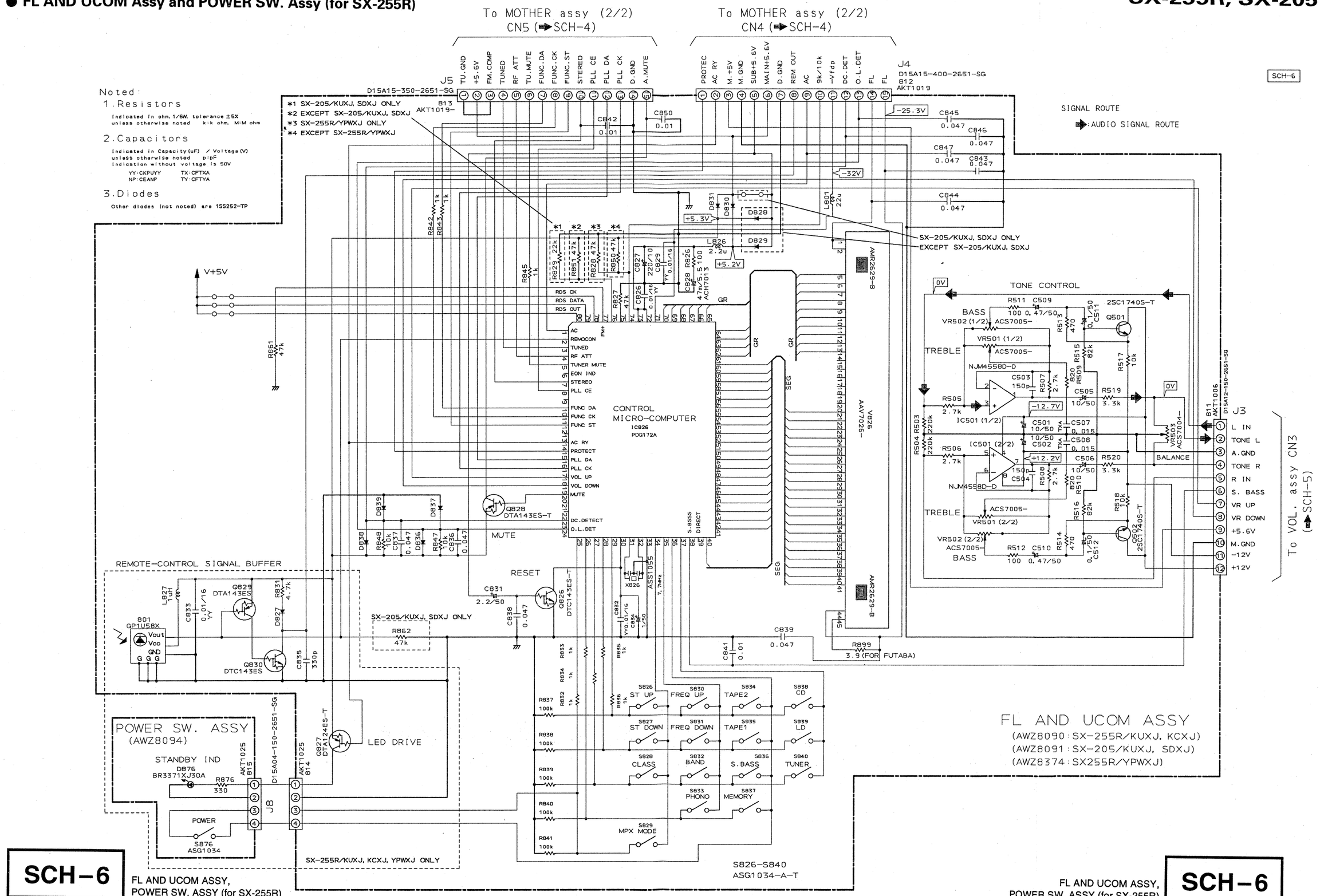


Q632 Q631 IC601
Q613 Q612 Q614 Q615
VR601

VR502 VR501 VR503

Q832 Q827
Q830 Q829
IC826 Q828
Q826
Q501 IC501 Q502

● FL AND UCOM Assy and POWER SW. Assy (for SX-255R)



SCH-6 FL AND UCOM ASSY, POWER SW. ASSY (for SX-255R)

FL AND UCOM ASSY, POWER SW. ASSY (for SX-255R) **SCH-6**

6. PCB PARTS LIST

NOTES :

- *Parts marked by " NSP " are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by " ◉ " are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560 Ω → 56 x 10¹ = 561 ..... RD1/4PU 5 6 1 J
47k Ω → 47 x 10³ = 473 ..... RD1/4PU 4 7 3 J
0.5 Ω → 0R5 ..... RN2H 0 R 5 K
1 Ω → 1R0 ..... RS1P 1 R 0 K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω → 562 x 10¹ = 5621 ..... RN1/4PC 5 6 2 1 F

Parts List for SX-255R/KUXJ

Mark	No.	Description	Parts No.
LIST OF PCB ASSEMBLIES			
NSP		COMPLEX ASSY	AWK7254
		├ MOTHER ASSY	AWZ8086
		└ FM/AM TUNER FE MODULE	AXQ1002
		├ FL AND UCOM ASSY	AWZ8090
		├ VOL. ASSY	AWZ8092
		├ POWER SW. ASSY	AWZ8094
		├ SP SW. AND HP. ASSY	AWZ8096
		├ TRANS ASSY	AWZ8097
		├ REG ASSY	AWZ8389
NSP		├ PRIMARY ASSY	AWZ8369
NSP		└ BARRIER ASSY	AWZ8371
COMPLEX ASSY			
OTHERS			
	J21	LEAD WIRE UNIT	DB015NBO
	J23	LEAD WIRE UNIT	DB815NBO
MOTHER ASSY			
SEMICONDUCTORS			
	IC131	PLL IC	LM7001J
	IC151	AM/FM IC	LA1851N
	IC201	OP-AMP IC	NJM4558D-D
	IC202	E-SW IC	TC9164AN
	IC203	OP-AMP IC	NJM4558D-D
	IC301	IC	UPC4570C
	Q102	TRANSISTOR	2SA1529
	Q103	TRANSISTOR	2SC2668
	Q104	TRANSISTOR	2SA854S
	Q1301, Q1302	TRANSISTOR	2SC2878
	Q131	N-FET	2SK246
	Q132	TRANSISTOR	2SC1740SLN
	Q151	TRANSISTOR	2SA933S
	Q191, Q192	TRANSISTOR	2SA933S
	Q301, Q302	TRANSISTOR	2SC2705
	Q303–Q306	TRANSISTOR	2SA1145
	Q307, Q308	TRANSISTOR	2SC2705
⚠	Q309, Q310	TRANSISTOR	2SC1740S
⚠	Q311, Q312	TRANSISTOR	2SC4793
⚠	Q313, Q314	TRANSISTOR	2SA1837
	Q381, Q382	TRANSISTOR	2SC2240
	Q401	TRANSISTOR	DTC143ES
	Q402, Q403	TRANSISTOR	2SC1740S
	Q404	TRANSISTOR	2SC2240
	Q406	TRANSISTOR	2SA965
	Q407	TRANSISTOR	2SC2235
	D301–D308	DIODE	1SS252
	D309–D312	ZENER DIODE	MTZJ3.3B
	D381–D386	DIODE	1SS252
	D387, D388	ZENER DIODE	MTZJ10B
	D389–D392	DIODE	1SS252
	D393, D394	ZENER DIODE	MTZJ10B
	D401	DIODE	D5SBA20(B)
	D402–D405	DIODE	S5688G
	D406	ZENER DIODE	MTZJ8.2A
	D407	ZENER DIODE	MTZJ13B
	D408	ZENER DIODE	MTZJ6.2B
	D409	ZENER DIODE	MTZJ6.8A
	D411, D412	DIODE	1SS252
	D413	ZENER DIODE	MTZJ4.7B
	D414	ZENER DIODE	MTZJ5.6A
	D415	DIODE	S5688G
	D416	ZENER DIODE	MTZJ5.6A
	D417	DIODE	1SS252
	D418, D419	ZINER DIODE	MTZJ8.2A
RELAYS			
	RY401	RELAY	ASR1044
	RY402	RELAY	ASR7001
COILS AND FILTERS			
	F101	CERAMIC FILTER	ATF-119
	F102	CERAMIC FILTER	ATF-107
	F151	CERAMIC FILTER	ATF-208
	L131	AXIAL INDUCTOR	LAU2R2J
	L151	COIL	ATE7001
	L152	AXIAL INDUCTOR	LAU220J
TRANSFORMER			
⚠	T401	POWER TRANSFORMER	ATT1223
CAPACITORS			
	C101	CERAMIC CAPACITOR	CGCYX103M16
	C102, C103	CERAMIC CAPACITOR	CGCYX473M16
	C104	CERAMIC CAPACITOR	CGCYX103M16
	C106, C108	CERAMIC CAPACITOR	CKPUYY103M16
	C109	CERAMIC CAPACITOR	CCPUCH100J50
	C110, C111	CERAMIC CAPACITOR	CGCYX473M16
	C113	CERAMIC CAPACITOR	CKPUYY103M16
	C115, C116	CERAMIC CAPACITOR	CGCYX103M16
	C119	CERAMIC CAPACITOR	CGCYX103M16
	C131, C132	CERAMIC CAPACITOR	CCPUCH150J50
	C133	ELECT. CAPACITOR	CEAS470M25
	C134	CERAMIC CAPACITOR	CKPUYY103M16
	C135	ELECT. CAPACITOR	CEAS470M25
	C136	AUDIO FILM CAPACITOR	CFTXA224J50
	C137	CERAMIC CAPACITOR	CGCYX103M16
	C139	CERAMIC CAPACITOR	CGCYX473M16
	C151, C152	CERAMIC CAPACITOR	CGCYX473M16
	C153	ELECT. CAPACITOR	CEAS470M25
	C154	ELECT. CAPACITOR	CEAS100M50
	C155	CERAMIC CAPACITOR	CGCYX473M16
	C156	ELECT. CAPACITOR	CEAS100M50
	C157	CERAMIC CAPACITOR	CKPUYB102K50
	C158	CERAMIC CAPACITOR	CGCYX183M25
	C159	ELECT. CAPACITOR	CEAS4R7M50
	C162, C163	ELECT. CAPACITOR	CEAS010M50
	C164	ELECT. CAPACITOR	CEASR33M50
	C165, C166	AUDIO FILM CAPACITOR	CFTXA153J50
	C171	ELECT. CAPACITOR	CEAS100M50
	C172	CERAMIC CAPACITOR	CKPUYB102K50
	C173	ELECT. CAPACITOR	CEAS4R7M50
	C174, C175	CERAMIC CAPACITOR	CKPUYY103M16
	C185	CERAMIC CAPACITOR	CCCSL470J50
	C191, C192	ELECT. CAPACITOR	CEAS4R7M50
	C193	CERAMIC CAPACITOR	CGCYX103M16
	C194	ELECT. CAPACITOR	CEAS470M25
	C207, C208	ELECT. CAPACITOR	CEAS101M25
	C209, C210	PLASTIC FILM CAPACITOR	CQMA822J50
	C211, C212	PLASTIC FILM CAPACITOR	CQMA242J50
	C213, C214	ELECT. CAPACITOR	CEAS4R7M50
	C215, C216	CERAMIC CAPACITOR	CKCYF103Z50
	C217, C218	ELECT. CAPACITOR	CEAS2R2M50
	C219, C220	CERAMIC CAPACITOR	CKCYF103Z50
	C221, C222	ELECT. CAPACITOR	CEAS2R2M50
	C223, C224	CERAMIC CAPACITOR	CKCYF103Z50
	C225, C226	ELECT. CAPACITOR	CEAS4R7M50
	C227	CERAMIC CAPACITOR	CKCYB102K50
	C228, C229	CERAMIC CAPACITOR	CKCYF103Z50
	C231, C232	ELECT. CAPACITOR	CEAS100M50
	C301, C302	ELECT. CAPACITOR	CEAS2R2M50
	C303, C304	CERAMIC CAPACITOR	CKCYB471K50
	C305, C306	ELECT. CAPACITOR	CEAS101M50
	C307–C310	CERAMIC CAPACITOR	CCCSL151K500
	C311, C312	ELECT. CAPACITOR	CEAS2R2M50
	C317, C318	AUDIO FILM CAPACITOR	CFTXA473J50
	C381, C382	ELECT. CAPACITOR	CEAS4R7M50
	C383, C384	ELECT. CAPACITOR	CEAS101M25
	C385, C386	CERAMIC CAPACITOR	CKCYF103Z50
	C401, C402	ELECT. CAPACITOR (8200 μ F/DC71V)	ACH7018
	C403	ELECT. CAPACITOR	CEAS101M25
	C404	ELECT. CAPACITOR	CEAS102M35
	C405	ELECT. CAPACITOR	CEAS470M25
	C406	ELECT. CAPACITOR	CEAS471M35
	C407–C409	ELECT. CAPACITOR	CEAS101M25
	C410	ELECT. CAPACITOR	CEAS471M25
	C411	CERAMIC CAPACITOR	CKCYF103Z50
	C412	CAPA. (0.022 μ F/AC400V)	ACG1030
	C413	CAPA. (0.01 μ F/AC250V)	ACG7020
	C415	ELECT. CAPACITOR	CEAS221M16
	C417	ELECT. CAPACITOR	CEAS101M25
	C421	ELECT. CAPACITOR	CEAS101M35
	C423	ELECT. CAPACITOR	CEAS470M25
RESISTORS			
	VR151	VR (10k Ω, 0.1W)	ACP1043
	R311, R312	CARBON FILM RESISTOR	RD1/2PM821J
⚠	R321–R324	CARBON FILM RESISTOR	RD1/4PMF102J
⚠	R329–R332	CARBON FILM RESISTOR	RD1/4PMF680J
⚠	R347–R350	FUSIBLE RESISTOR	RFA1/4PS4R7J
⚠	R351–R354	FUSIBLE RESISTOR	RFA1/4PS470J
⚠	R355–R358	CARBON FILM RESISTOR	RD1/4PMF151J
⚠	R363–R366	FUSIBLE RESISTOR	RFA1/4PS4R7J
⚠	R369, R370	RESISTOR (0.33 Ω, 5W)	ACN-139
	R371, R372	METAL OXIDE RESISTOR	RS2LMF100J
⚠	R381–R384	CARBON FILM RESISTOR	RD1/4PMF222J
⚠	R395, R396	CARBON FILM RESISTOR	RD1/4PMF101J
	R403	CARBON FILM RESISTOR	RD1/2PM221J
	R404	METAL OXIDE RESISTOR	RS3LMF681J
	R405, R406	METAL OXIDE RESISTOR	RS3LMF272J
	R409	METAL OXIDE RESISTOR	RS2LMF121J
	R410	CARBON FILM RESISTOR	RD1/2PM270J
	R415	RESISTOR(2.2M Ω, 1/2W)	ACN-208
	R419	METAL OXIDE RESISTOR	RS3LMF182J
	R420	METAL OXIDE RESISTOR	RS3LMF681J
		Other Resistors	RD1/4PU□□□J
OTHERS			
		AM RF TUNING BLOCK	AXX7025
		EARTH METAL PLATE	VNF-091
		PIN JACK (6P)	AKB7012
		PIN JACK (4P)	AKB7014
		CABLE HOLDER (12P)	AKT1085
		AC SOCKET 1-P	AKP1060
	BN101	TERMINAL 4-P	AKA1016
	CN2	CONNECTOR (9P)	KPE9
	CN4, CN5	CONNECTOR (15P)	KPE15
	CN9	CONNECTOR (3P)	KPE3
	CN901	SPEAKER TERMINAL 8-P	AKE7021
	JA203	JACK/12V	PKN1004
	X131	CRYSTAL RESONATOR	ASS1042
	X151	CRYSTAL RESONATOR	ASS1066
		FM/AM TUNER FE MODULE	AXQ1002

Note: FM/AM TUNER FE MODULE has no service part.

FL AND UCOM ASSY

Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	IC501	OP-AMP IC	NJM4558D-D
	IC826	CONTROL MCU	PDG172A
	Q501, Q502	TRANSISTOR	2SC1740S
	Q826	TRANSISTOR	DTC143ES
	Q827	TRANSISTOR	DTA124ES
	Q828, Q829	TRANSISTOR	DTA143ES
	Q830	TRANSISTOR	DTC143ES
	D827–D831	DIODE	1SS252
	D836–D839	DIODE	1SS252
SWITCHES AND RELAYS			
	S826–S840	SWITCH	ASG1034

Mark	No.	Description	Parts No.
COILS AND FILTERS			
	L801	AXIAL INDUCTOR	LAU220J
	L826	AXIAL INDUCTOR	LAU2R2J
	L827	AXIAL INDUCTOR	LAU010J
CAPACITORS			
	C501, C502	ELECT. CAPACITOR	CEAS100M50
	C503, C504	CERAMIC CAPACITOR	CKPUYB151K50
	C505, C506	ELECT. CAPACITOR	CEAS100M50
	C507, C508	AUDIO FILM CAPACITOR	CFTXA153J50
	C509, C510	ELECT. CAPACITOR	CEASR47M50
	C511, C512	ELECT. CAPACITOR	CEAS0R1M50
	C826	CERAMIC CAPACITOR	CKPUYY103M16
	C827	ELECT. CAPACITOR	CEAS221M10
	C828	CAPACITOR (47mF/DC5.5V)	ACH7013
	C829	CERAMIC CAPACITOR	CKPUYY103M16
	C831	ELECT. CAPACITOR	CEAS2R2M50
	C832, C833	CERAMIC CAPACITOR	CKPUYY103M16
	C834	ELECT. CAPACITOR	CEAS010M50
	C835	CERAMIC CAPACITOR	CKCYB331K50
	C836–C838	CERAMIC CAPACITOR	CGCYX473M16
	C839	CERAMIC CAPACITOR	CKPUYF473Z50
	C841, C842	CERAMIC CAPACITOR	CKPUYY103M16
	C843, C844	CERAMIC CAPACITOR	CKCYF103Z50
	C845–C847	CERAMIC CAPACITOR	CGCYX473M16
	C850	CERAMIC CAPACITOR	CKPUYY103M16
RESISTORS			
	VR501, VR502	VARIABLE RESISTOR	ACS7005
	VR503	VARIABLE(500kΩ)	ACS7004
		Other Resistors	RD1/4PU□□□J
OTHERS			
		REMOTE RECEIVER UNIT	GP1U58X
	V826	FL TUBE	AAV7026
	X826	CERAMIC RESONATOR (7.7MHz)	ASS1055

VOL. ASSY

SEMICONDUCTORS			
	IC601	OP–AMP IC	NJM4558D–D
	Q612, Q613	TRANSISTOR	2SA1115
	Q614, Q615	TRANSISTOR	2SC2603
	Q631, Q632	TRANSISTOR	DTC143ES
CAPACITORS			
	C605, C606	ELECT. CAPACITOR	CEAS2R2M50
	C607, C608	CERAMIC CAPACITOR	CGCYX104M16
	C609, C610	ELECT. CAPACITOR	CEAS4R7M50
	C611	ELECT. CAPACITOR	CEANP4R7M50
	C612	ELECT. CAPACITOR	CEAS470M25
	C631, C632	AUDIO FILM CAPACITOR	CFTXA153J50
	C633, C634	AUDIO FILM CAPACITOR	CFTXA823J50
RESISTORS			
	VR601	VARIABLE RESISTOR (100k–A5×2Ω)	ACX7021
		Other Resistors	RD1/4PU□□□J
OTHERS			
		CABLE HOLDER	AKT1023
	CN3	CONNECTOR (12P)	KPE12

Mark	No.	Description	Parts No.
POWER SW. ASSY			
SEMICONDUCTOR			
	D876	RED LED	BR3371XJ30A
SWITCH			
	S876	SWITCH	ASG1034
RESISTOR			
	R876	CARBON FILM RESISTOR	RD1/4PU331J
SP SW. AND HP. ASSY			
SWITCHES			
	S701	PUSH SWITCH	ASG1026
	S702	PUSH SWITCH	ASG1017
RESISTORS			
	R701, R702	METAL OXIDE RESISTOR	RS2LMF331J
OTHERS			
	CN701	JACK	AKN7001
TRANS ASSY			
OTHERS			
		CABLE HOLDER (12P)	AKT1085
REG ASSY			
SEMICONDUCTOR			
	IC401	REGULATOR IC	NJM78M12FA
CAPACITORS			
	C419, C420	ELECT. CAPACITOR	CEAS010M50

PRIMARY ASSY

PRIMARY Assy has no service part.

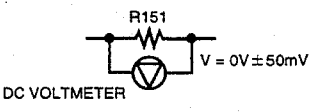
BARRIER ASSY

BARRIER Assy has no service part.

7. ADJUSTMENTS

ADJUSTMENT OF FM TUNER SECTION

- Set the FM/AM selector to FM BAND.
- Connect the wiring as shown in Fig. 1–1.

Step No.	Adjustment Title	FM SG (1kHz, ±75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Center Adjustment	98	60	98.0 MHz	L151	Adjust so that the DC voltage of R151's both ends becomes 0V±50mV. 
2	Front End Sencitivity Check	98	Less than 10	98.0 MHz	——	Less than 10 dBμV
3	Stereo Distortion Check	89	60	89.0 MHz	T101	Less than 2%. Check that it becomes within the standard by turning the IFT T101 in the FM/AM TUNER MODULE less than ±90° in case out of standard.
4	Stereo Separation Check	89	60	89.0 MHz	——	Less than 23 dB. In case out of standard, cut the R157.
5	TUNED IND. Lighting Level	98	18 (±3 dB)	98.0 MHz	VR151	18 dBμV±3 dB. Adjust so that the indicator of TUNED IND. starts to light up.

Note: Make indicator adjustments in order of AM → FM.

ADJUSTMENT OF AM (MW) TUNER SECTION

- Set the FM/AM selector to AM (MW) BAND.
- Connect the wiring as shown in Fig. 1–1.

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dBμV/m)			
1	TUNED IND. Lighting Level Check	999*1	Less than 65	999kHz*1	——	Less than 65dBμV/m. In case out of standard, cut the R164.

**1 : For the area using 10 kHz step, frequencies should be 1000 kHz.*

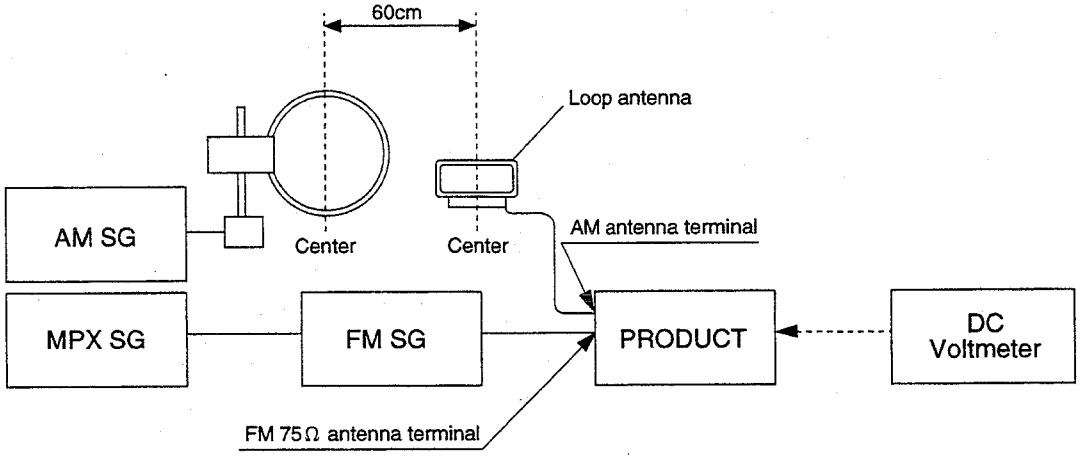
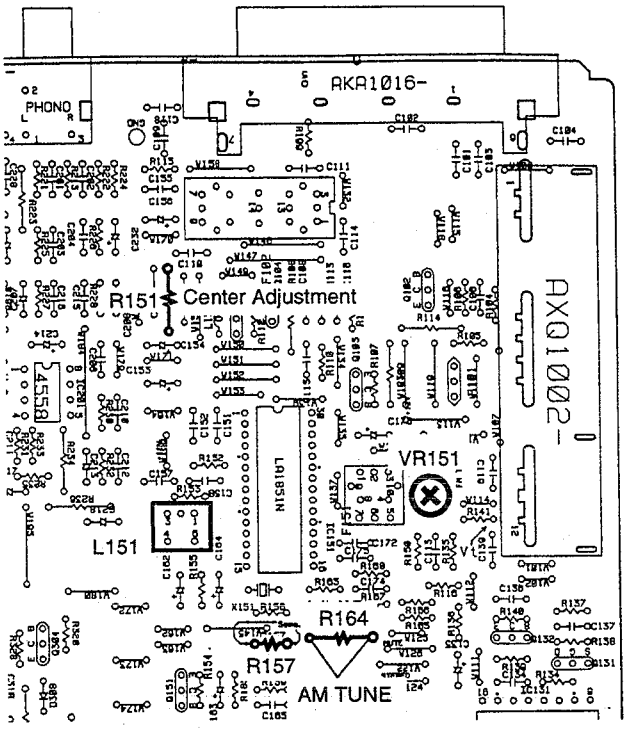


Fig. 1–1 FM and AM Adjustment Wiring Diagram

MOTHER Assy



FM/AM TUNER FE MODULE

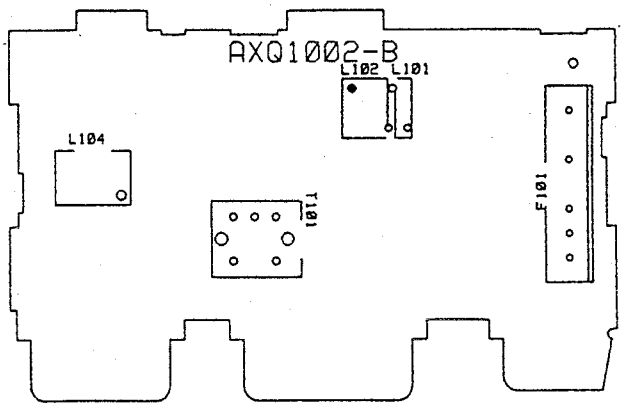


Fig. 1–2 Adjustment Points

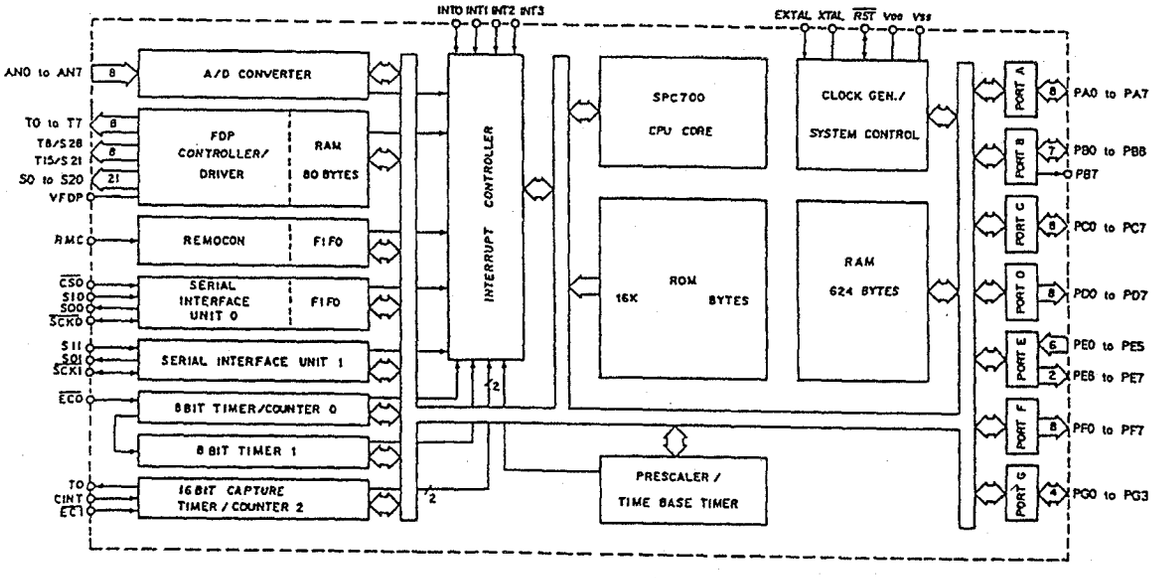
8. IC INFORMATION

- *The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.*

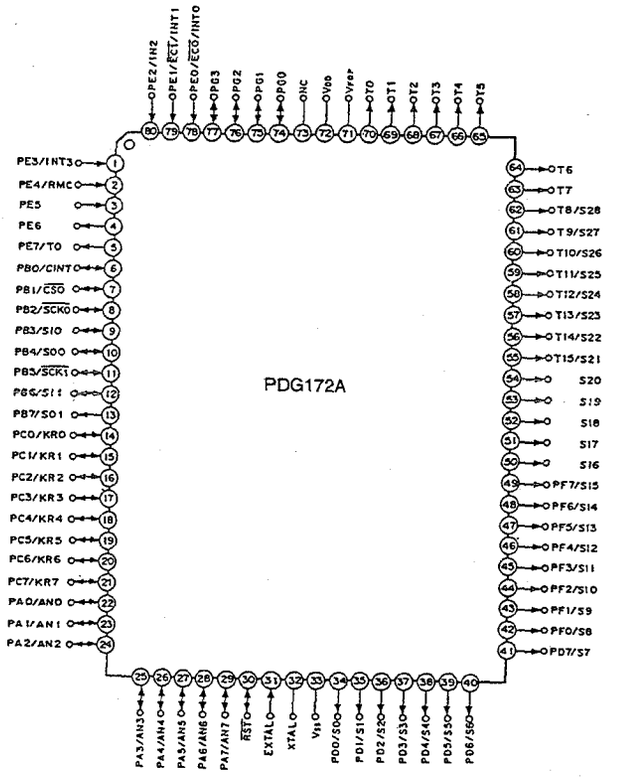
■ PDG172A (IC826: FL AND UCOM ASSY)

● Receiver Control Micro-computer

● Block Diagram



● Pin Assignment (Top view)



● Pin Function

No.	Pin Name	I/O	Description
1	PE3/INT3	I	External interrupt request input terminal
2	PE4/RMC	I	Remote control reception circuit input terminal
3	PE5	I	
4	PE6	O	
5	PE7/T0	O	16 bit timer/counter rectangular wave output terminal
6	PB0/CINT	I/O	External capture input terminal to the 16-bit timer/counter
7	PB1/$\overline{CS0}$	I/O	Serial interface (CH 0) chip select input terminal
8	PB2/$\overline{SCK0}$	I/O	Serial clock (CH 0) I/O terminal
9	PB3/SI0	I	Serial data (CH 0) input terminal
10	PB4/SO0	O	Serial data (CH 0) output terminal
11	PB5/$\overline{SCK1}$	I/O	Serial clock (CH 1) I/O terminal
12	PB6/SI1	I	Serial data (CH 1) input terminal
13	PB7/SO1	O	Serial data (CH 1) output terminal

No.	Pin Name	I/O	Description
14 | 21	PC0/KR0 | PC7/KR7	I	Key return input terminal for key scan by FDP segment signal
22 | 29	PA0/AN0 | PA7/AN7	I	A/D converter analog input terminal
30	RST	I/O	" L " level active system reset terminal. The RST terminals are I/O terminals, and at the time of power supply start-up, the built-in power ON reset function operates and executes " L " level output. (Mask option)
31	EXTAL	I	System clock oscillstion crystal connection terminal. For external clock supply, execute input to the EXTAL terminal and supply input of a reverse-phase clock signal to the XTAL terminal.
32	XTAL	O	
33	Vss	—	GND terminal
34 | 41	PD0/S0 | PD7/S7	O	FDP segment signal output terminal
42 | 49	PF0/S8 | PF7/S15		
50 | 54	S16 | S20		
55 | 62	T15/S21 | T8/S28	O	Combined output terminal for FDP timing signal and segment signal
63 | 70	T7 | T0	O	FDP timing signal output terminal
71	VFDP	—	FDP voltage supply signal when internal resistance has been specified by the mask option.
72	VDD	—	Positive power supply terminal
73	NC	—	NC terminal Connect this terminal to VDD for normal operation.
74 | 77	PG0 | PG3	I/O	

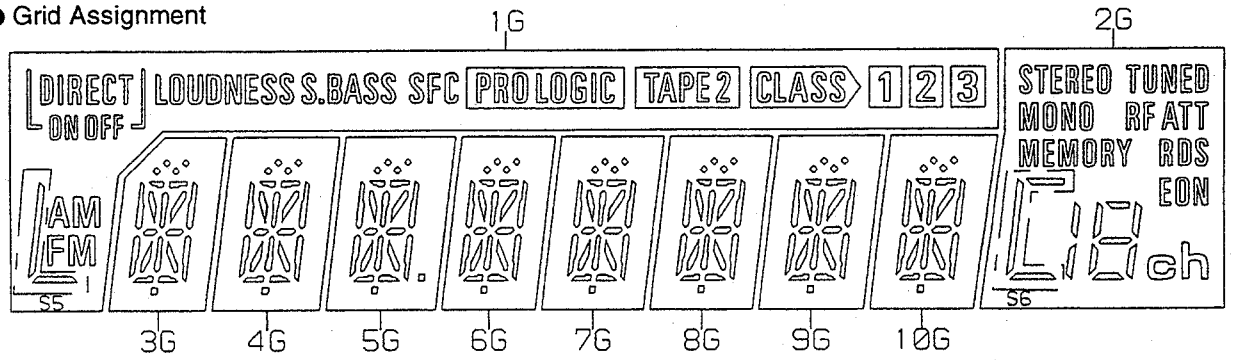
No.	Pin Name	I/O	Description
78	PE0/INT0/$\overline{EC0}$	I	External interrupt request input terminal Timer/counter external event input terminal
79	PE1/INT1/$\overline{EC1}$		
80	PE2/INT2	I	External interrupt request input terminal

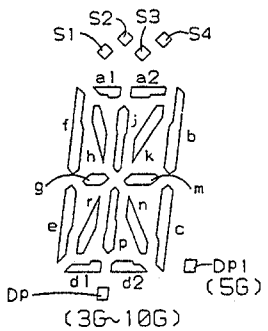
9. FL INFORMATION

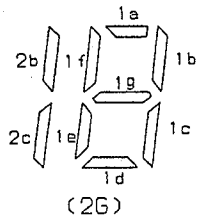
■ AAV7026 (V826: FL AND UCOM ASSY)

● FL Tube

● Grid Assignment



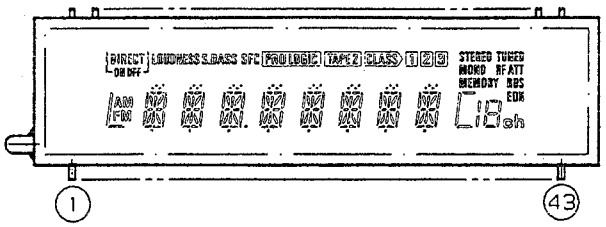




● Anode Connection

	1G	2G	3G,4G,6G~10G	5G
S1	S5	S6	a1	a1
S2	FM	2b,2c	a2	a2
S3	AM	1a	h	h
S4	DIRECT	1b	j	j
S5	ON	1c	k	k
S6	OFF	1d	b	b
S7	PROLOGIC	1e	f	f
S8	SFC	1f	m	m
S9	LOUDNESS	1g	g	g
S10	S.BASS	eh	c	c
S11	TAPE2	STEREO	e	e
S12	CLASS	TUNED	r	r
S13	1	MONO	p	p
S14	2	RF ATT	n	n
S15	3	MEMORY	d1	d1
S16	-	RDS	d2	d2
S17	-	EON	Dp	Dp
S18	-	-	S1,S3	S1,S3
S19	-	-	S4	S4
S20	-	-	S2	S2
S21	-	-	-	Dp1

● Pin Assignment



● Pin Connection

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
CONNECTION	F1	F1	NP	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	NX	NX	NX	NX	NX	NX	P21	P16	P17	P15	P13	P12	P14	P11	P10	P9	P8	P7	P6	P5	P3	P4	P2	P1	P18	P19	P20	NP	NX	F2

NOTE 1) F1,F2 --- Filament
2) NP ------ No pin
3) NX ------ No extend pin
4) DL ------ Datum Line
5) 1G~10G --- Grid

10. FOR SX-255R/KCXJ, YPWXJ, SX-205/KUXJ AND SDXJ

NOTES :

- *Parts marked by " NSP " are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by " ◉ " are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 *When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).*

560Ω → 56 x 10¹ = 561 ..... RD1/4PU 5 6 1 J
47kΩ → 47 x 10³ = 473 ..... RD1/4PU 4 7 3 J
0.5Ω → 0R5 ..... RN2H 0 R 5 K
1Ω → 1R0 ..... RS1P 1 R 0 K

Ex. 2 *When there are 3 effective digits (such as in high precision metal film resistors).*

5.62kΩ → 562 x 10¹ = 5621 ..... RN1/4PC 5 6 2 1 F

CONTRAST OF MISCELLANEOUS PARTS

SX-255R/KCXJ, YPWXJ, SX-205/KUXJ, SDXJ and SX-255R/KUXJ have the same construction except for the following:

Mark	No.	Symbol & Description	Part No.					Remarks
			SX-255R/ KUXJ	SX-255R/ KCXJ	SX-255R/ YPWXJ	SX-205/ KUXJ	SX-205/ SDXJ	
NSP		COMPLEX Assy	AWK7254	AWK7254	AWK7255	AWK7256	AWK7257	
	38	MOTHER Assy	AWZ8086	AWZ8086	AWZ8087	AWZ8088	AWZ8089	
	39	FL AND UCOM Assy	AWZ8090	AWZ8090	AWZ8374	AWZ8091	AWZ8091	
	43	VOL. Assy	AWZ8092	AWZ8092	AWZ8092	AWZ8093	AWZ8093	
	44	POWER SW. Assy	AWZ8094	AWZ8094	AWZ8094	AWZ8095	AWZ8095	
	41	TRANS Assy	AWZ8097	AWZ8097	AWZ8378	AWZ8097	AWZ8378	
NSP	46	PRIMARY Assy	AWZ8369	AWZ8369	AWZ8402	AWZ8369	AWZ8381	*1
NSP	47	BARRIER Assy	AWZ8371	AWZ8371	Not Used	AWZ8371	Not Used	
⚠	5, 6	Q3, Q4 Transistor	2SA1943	2SA1943	2SA1941	2SA1943	2SA1943	
⚠	3, 4	Q1, Q2 Transistor	2SC5200	2SC5200	2SC5198	2SC5200	2SC5200	
⚠	7	T1 Power Transformer (AC120V)	ATS7114	ATS7115	Not Used	ATS7114	Not Used	
⚠	7	T1 Power Transformer (AC240V)	Not Used	Not Used	ATS7120	Not Used	Not Used	
⚠	7	T1 Power Transformer (AC110V/120–127V/230V/240V)	Not Used	Not Used	Not Used	Not Used	ATS7117	
⚠	11, 12	FU3, FU4 Fuse (1A)	REK1075	REK1075	Not Used	REK1075	REK1075	
⚠	11, 12	FU3, FU4 Fuse (T800mA)	Not Used	Not Used	AEK1053	Not Used	Not Used	
⚠	9	FU1 Fuse (6.3A)	REK1085	REK1085	Not Used	REK1085	Not Used	
⚠	9	FU1 Fuse (T2.5A)	Not Used	Not Used	AEK1058	Not Used	Not Used	
⚠	9, 10	FU1, FU2 Fuse (3.15A)	Not Used	Not Used	Not Used	Not Used	REK1081	
⚠	23	Voltage Selector	Not Used	Not Used	Not Used	Not Used	AKX–507	
⚠	8	AC Power Cord	PDG1015	PDG1015	ADG1159	PDG1015	ADG1157	
	2	Front Panel	AMB7331	AMB7331	AMB7339	AMB7333	AMB7333	
	14	Rear Panel	ANC7339	ANC7386	ANC7342	ANC7340	ANC7344	
	16	Foot	AEC1505	AEC1505	Not Used	AEC1505	AEC1505	
	26	Insulator Assy	Not Used	Not Used	DXA1490	Not Used	Not Used	
	56	Insulator	Not Used	Not Used	PNW1912	Not Used	Not Used	
	20	Strain Relief	CM–22C	CM–22C	CM–22B	CM–22C	CM–22B	
	25	LED Lens	AAK2553	AAK2553	AAK2553	Not Used	Not Used	
	1	FL Panel	AAK7239	AAK7239	AAK7239	AAK7241	AAK7241	
	55	Nut	Not Used	Not Used	Not Used	NK90FUC	NK90FUC	
	35	Spring	Not Used	Not Used	Not Used	ABH7111	ABH7111	

Mark	No.	Symbol & Description	Part No.					Remarks
			SX-255R/ KUXJ	SX-255R/ KCXJ	SX-255R/ YPWXJ	SX-205/ KUXJ	SX-205/ SDXJ	
	68	Packing Case	AHD7265	AHD7265	AHD7269	AHD7267	AHD7271	
	57	Remote Control Unit (CU–SX108)	AXD7085	AXD7085	AXD7085	Not Used	Not Used	
	61	Battery Cover	AZA7123	AZA7123	AZA7123	Not Used	Not Used	
NSP	58	Battery (R6P, AA)	VEM–013	VEM–013	VEM–013	Not Used	Not Used	
	63	Operating Instructions (English)	ARB7064	ARB7064	ARB7067	ARB7064	ARB7064	
		Operating Instructions (French)	Not Used	ARC7102	Not Used	Not Used	Not Used	
		Operating Instructions (Spanish/Chinese)	Not Used	Not Used	Not Used	Not Used	ARC7103	
NSP	64	Warranty Card	ARY1051	ARY1075	PRY1003	ARY1051	Not Used	
	62	Caution 220V Label	Not Used	Not Used	Not Used	Not Used	ARR1003	

Notes **1: AWZ8369 and AWZ8402 has no service part. For AWZ8381, refer to " ■ PCB PARTS LIST".*
No.: The numbers are location number(s) on the " 3. EXPLODED VIEWS, PACKING AND PARTS LIST", respectively.

FL AND UCOM Assy

AWZ8374, AWZ8091 and AWZ8090 have the same construction except for the following:

Mark	Symbol & Description	Part No.			Remarks
		AWZ8090	AWZ8374	AWZ8091	
	Q827	DTA124ES	DTA124ES	Not Used	
	Q829	DTA143ES	DTA143ES	Not Used	
	Q830	DTC143ES	DTC143ES	Not Used	
	D827–D829	1SS252	1SS252	Not Used	
	L827	LAU010J	LAU010J	Not Used	
	C833	CKPUYY103M16	CKPUYY103M16	Not Used	
	C835	CKCYB331K50	CKCYB331K50	Not Used	
	R828	Not Used	RD1/4PU473J	Not Used	*2
	R829	Not Used	Not Used	RD1/4PU223J	*2
	R831	RD1/4PU472J	RD1/4PU472J	Not Used	
	R850	RD1/4PU473J	Not Used	RD1/4PU473J	
	R851	RD1/4PU473J	RD1/4PU473J	Not Used	
	R862	Not Used	Not Used	RD1/4PU473J	*2
	Remote Receiver Unit	GP1U58X	GP1U58X	Not Used	

Note **2: Refer to " 5. SCHEMATIC AND PCB CONNECTION DIAGRAMS".*

VOL. Assy

AWZ8093 and AWZ8092 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		AWZ8092	AWZ8093	
	Q612, Q613	2SA1115	Not Used	
	Q614, Q615	2SC2603	Not Used	
	C611	CEANP4R7M50	Not Used	
	C612	CEAS470M25	Not Used	
	VR601	ACX7021	ACT7001	
	R619, R620	RD1/4PU471J	Not Used	
	R621, R622	RD1/4PU473J	Not Used	
	R623, R624	RD1/4PU102J	Not Used	

MOTHER Assy

AWZ8087, AWZ8088, AWZ8089 and AWZ8086 have the same construction except for the following:

Mark	Symbol & Description	Part No.				Remarks
		AWZ8086	AWZ8087	AWZ8088	AWZ8089	
	Q401	DTC143ES	DTC143ES	Not Used	Not Used	
	Q407	2SC2235	2SC2235	Not Used	Not Used	
	D411	1SS252	1SS252	Not Used	Not Used	
	D414, D416	MTZJ5.6A	MTZJ5.6A	Not Used	Not Used	
	D415	S5688G	M5688G	Not Used	Not Used	
	D417	1SS252	Not Used	1SS252	1SS252	
	S402 (9kHz/10kHz)	Not Used	Not Used	Not Used	ASH1027	*2
	RY401	ASR1044	ASR1044	Not Used	Not Used	
⚠	T401	ATT1223	ATT1193	Not Used	Not Used	
	C165, C166	CFTXA153J50	CFTXA103J50	CFTXA153J50	CFTXA123J50	
	C203, C204	Not Used	CCCSL221J50	Not Used	Not Used	*2
	C317, C318	CFTXA473J50	CFTYA104J50	CFTXA473J50	CFTXA473J50	
	C319, C320	Not Used	CFTYA104J50	Not Used	Not Used	*2
	C401, C402	ACH7018 (8200 μ F/DC71V)	ACH1265 (8200 μ F/DC50V)	ACH7018 (8200 μ F/DC71V)	ACH7019 (8200 μ F/DC80V)	
	C409, C417	CEAS101M25	CEAS101M25	Not Used	Not Used	
	C410	CEAS471M25	CEAS471M25	Not Used	Not Used	
	C411	CKCYF103Z50	CKCYF103Z50	Not Used	Not Used	
	C412 (0.022 μ F/AC400V)	ACG1030	ACG1030	Not Used	Not Used	
	C413 (0.01 μ F/AC250V)	ACG7020	ACG7020	Not Used	Not Used	
	C415	CEAS221M16	CEAS221M10	CEAS221M16	CEAS221M16	
	C416	Not Used	CEAS2R2M50	Not Used	Not Used	*2
	C422 (0.1 μ F/AC250V)	Not Used	Not Used	ACE-507	ACE7004	*2
	C423	CEAS470M25	Not Used	CEAS470M25	Not Used	
	R333, R334	RD1/4PU392J	RD1/4PU272J	RD1/4PU392J	RD1/4PU392J	
	R351–R354	RFA1/4PS470J	RD1/4PMF470J	RFA1/4PS470J	RFA1/4PS470J	
	R403	RD1/2PM221J	Not Used	RD1/2PM221J	RD1/2PM221J	
	R409	RS2LMF121J	RS2LMF121J	Not Used	Not Used	
	R410	RD1/2PM270J	RD1/2PM270J	Not Used	Not Used	
	R415 (2.2MΩ, 1/2W)	ACN-208	Not Used	ACN-208	Not Used	
	R416	RD1/4PU332J	RD1/4PU332J	Not Used	Not Used	
	R422	Not Used	RS3LMF221J	Not Used	Not Used	*2
	R4001	Not Used	Not Used	Not Used	RD1/4PU102J	*2
⚠	1P AC Outlet	AKP1060	Not Used	AKP1060	AKP1060	
	JA203	PKN1004	PKN1004	Not Used	Not Used	

*Note *2: Refer to " 5. SCHEMATIC AND PCB CONNECTION DIAGRAMS".*

POWER SW. Assy

AWZ8095 and AWZ8094 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		AWZ8094	AWZ8095	
	D876	BR3371XJ30A	Not Used	
	S401	Not Used	ASG1035	*2
	S876	ASG1034	Not Used	
	C418 (0.01 μ F/AC250V)	Not Used	ACG7020	*2
	R876	RD1/4PU331J	Not Used	

*Note *2: Refer to " 5. SCHEMATIC AND PCB CONNECTION DIAGRAMS".*

TRANS Assy

AWZ8378 and AWZ8097 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		AWZ8097	AWZ8378	
	C952–C954	Not Used	CKCYF103Z50	*2
	R952	Not Used	RD1/4PU100J	*2
	J36	Not Used	DB015EB0	*2

*Note *2: Refer to " 5. SCHEMATIC AND PCB CONNECTION DIAGRAMS".*

■ PCB PARTS LIST

Mark	No.	Description	Parts No.
PRIMARY ASSY (AWZ8381 for SX-205/SDXJ)			
OTHERS			
	J24	LEAD WIRE UNIT	DB420EB0
	J25	LEAD WIRE UNIT	DB220EB0
	J26	LEAD WIRE UNIT	DB920EB0
	J27	LEAD WIRE UNIT	DB820EB0
	J28	LEAD WIRE UNIT	DB520EB0

11. SPECIFICATIONS

Amplifier Section

Continuous Average Power Output is 100 watts* per channel, min., at 8 ohms from 40 Hertz to 20,000 Hertz with no more than 0.9% total harmonic distortion.**

[Multi-voltage model only]
Continuous Power Output (DIN)
1 kHz,T.H.D. 1%,8 Ω ..... 115 W+115 W
Dynamic Power (2 Ω/4 Ω/8 Ω) ..... 260 W/ 220 W/ 150 W
Input (Sensitivity/Impedance) ..... 200 mV/47 kΩ
Output (Level/Impedance)
TAPE 2 REC, TAPE 1/VCR REC ..... 200mV/2.2 kΩ
Frequency Response ..... 10 Hz to 100 kHz $^{+0}_{-3.0}$dB
BASS ..... 100 Hz,±10 dB
TREBLE ..... 10 kHz, ±10 dB
SUPER BASS ..... 80 Hz,+8 dB
Signal-to-Noise Ratio (IHF, shortcircuited, A network)
PHONO MM ..... 72 dB
CD, TAPE 1/VCR, TAPE 2, LD/DVD ..... 96 dB

FM Tuner Section
Frequency range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... 11.2 dBf, IHF (1.0 μV/ 75 Ω)
50 dB Quieting Sensitivity
MONO ..... 16.8 dBf (1.9 μV/ 75 Ω)
STEREO ..... 38.6 dBf (23.3 μV/ 75 Ω)
Signal-to-Noise Ratio
MONO ..... 76 dB (at 85 dBf)
STEREO ..... 72 dB (at 85 dBf)
Distortion
MONO ..... 0.5% (1 kHz)
STEREO ..... 0.5% (1 kHz)
Alternate Channel Selectivity ..... 60dB (400 kHz)
Stereo Separation ..... 40dB (1 kHz)
Frequency Response ..... 30 Hz to 15 kHz (± 1 dB)
Antenna Input ..... 75 unbalanced

AM Tuner Section
Frequency range
When 10 kHz step ..... 530 kHz to 1,700 kHz
When 9 kHz step ..... 531 kHz to 1,602 kHz
Sensitivity
IHF, Loop antenna ..... 350 μV/m
Selectivity 25dB
Signal-to-Noise Ratio 50dB
Antenna ..... AM Loop Antenna

Miscellaneous
Power Requirements
U.S. and Canadian models ..... AC 120 Volts, 60 Hz
Multi-voltage model ..... AC 110V/120V – 127V /220V/240V (switchable),50/60 Hz
Power Consumption
U.S. and Canadian models ..... 190 W (UL), 330 VA (CSA)
Multi-voltage model ..... 520 W
AC Outlet ..... SWITCHED x 1 : 100W MAX
Dimensions ..... 420 (W) x 140 (H) x 298 (D) mm 16-9/16 (W) x 5-8/16 (H) x 11-12/16 (D) in
Weight (without package)
U.S. and Canadian models ..... 6.6 kg (14 lb 9 oz)
Multi-voltage model ..... 6.8 kg

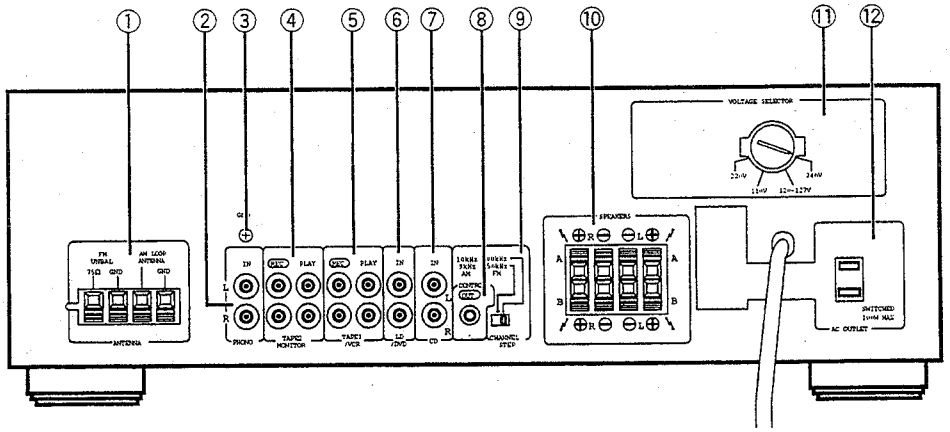
Furnished Parts
FM Antenna 1
AM Loop Antenna 1
Operating Instructions 1
[SX-255R]
Remote control unit 1
Dry cell batteries (size "AA" (R6P)) 2

* *Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.*
** *Measured By Audio Spectrum Analyzer.*

NOTE:
Specifications and design subject to possible modification without notice due to improvements.

12. PANEL FACILITIES

• The illustration shows SX-255R/SX-205 multi-voltage model.



① FM/AM ANTENNA terminals
Use these antenna terminals for receiving FM and AM broadcasts.

② PHONO jacks
Connect to the output cables from a turntable.

③ GND terminal
Connect to the ground lead of a turntable.
Use a screwdriver to connect with the ground terminal.

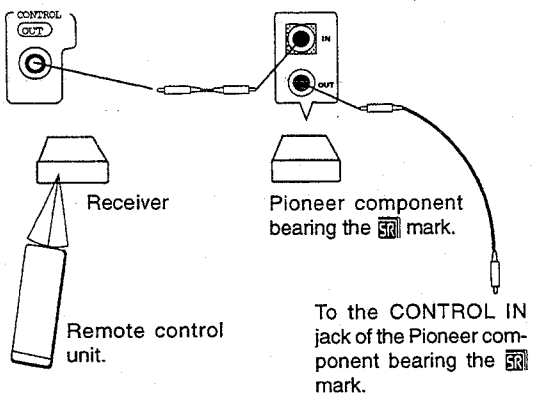
④ TAPE 2 MONITOR jacks
Connect these jacks to a cassette deck.

⑤ TAPE 1/VCR jacks
Connect these jacks to a cassette deck or video cassette recorder.

⑥ LD/DVD jacks
Connect to the output jacks of an LD player, DVD player or another unit.

⑦ CD jacks
Connect to the output jacks of a compact disc player.

⑧ CONTROL OUT jacks (SX-255R only)
Connect this jack to other Pioneer components bearing the SR mark when using the remote control of this unit to control the other components.



⑨ CHANNEL STEP switch (multi-voltage model only)

⑩ SPEAKERS terminals
A : Connect to a first set of speakers.
B : Connect to a second set of speakers.
NOTE:
No sound will be heard through the speakers when both A and B buttons are depressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

⑪ VOLTAGE SELECTOR (multi-voltage model only)

⑫ AC OUTLET

AC OUTLET
[U.S. and Canadian models]
SWITCHED 100 W (0.8 A) MAX
Power supplied through this outlet is turned on and off by the receiver's POWER switch. Electrical power consumption of the connected equipment should not exceed 100 W (0.8 A MAX).
The equipment should be disconnected by removing the mains plug from the wall socket when not in regular use, e.g. when on vacation.

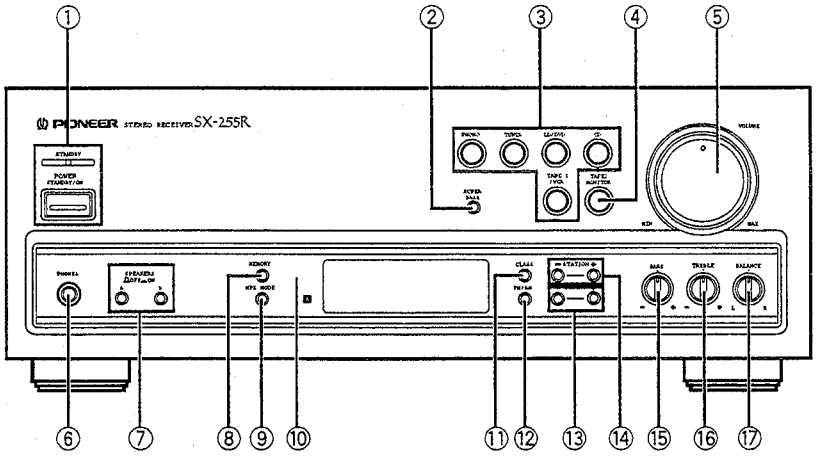
[Multi-voltage model]
SWITCHED 100 W MAX
Power supplied through this outlet is turned on and off by the receiver's POWER switch. Electrical power consumption of the connected equipment should not exceed 100 W.
The equipment should be disconnected by removing the mains plug from the wall socket when not in regular use, e.g. when on vacation.

CAUTION
DO NOT CONNECT MONITOR OR TV SET.

NOTE:
Do not connect appliances with high power consumption such as heaters, irons, or television sets to the AC OUTLET, in order to avoid overheating or fire risk.
This can cause the receiver to malfunction.

SX-255R, SX-205

• The illustration shows the SX-255R.



① POWER STANDBY/ON switch/STANDBY indicator (SX-255R)

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness. The STANDBY indicator is illuminated during standby mode.

• The accessory remote control unit can also be used to operate STANDBY/ON.

NOTE:

When the power is initially turned ON, muting will be applied to prevent sound from being output for approx. 5 seconds.

① POWER switch/POWER indicator (SX-205)

When this switch is pressed, power is supplied to the unit and the indicator lights up.

Press the switch again to turn power OFF.

[Timer ON/OFF possible]

When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

NOTE:

When the power is initially turned ON, muting will be applied to prevent sound from being output for approx. 5 seconds.

② SUPER BASS button

When this button is pressed, the bass sound will be emphasized.

③ Function buttons

Use to select playback source.

[PHONO]

Press when listening to record playback on a turntable.

[TUNER]

Press when listening to AM or FM broadcasts with a tuner.

[LD/DVD]

Press when listening to programs from a component connected to the LD/DVD jacks.

[CD]

Press when listening to compact disc playback with a CD player.

[TAPE 1/VCR]

Press when listening to tape playback on cassette deck 1 or on a video cassette recorder.

④ TAPE 2 MONITOR button

Press when listening to tape playback and monitor the recording sound with the cassette deck 2.

⑤ VOLUME control

Use to adjust volume level.

⑥ PHONES jack

Connect the plug on your headphones to this jack. To listen to a program through the headphones, set both SPEAKERS A and B switches to the OFF position.

⑦ SPEAKERS (■ OFF, ▬ ON) buttons

These are used to select the speaker through which you wish to listen.

A: When the speakers connected to the A terminals are in use.

B: When the speakers connected to the B terminals are in use.

• Turn both A and B speakers to the OFF position when only the headphones are in use.

NOTE:

No sound will be heard through the speakers when both A and B buttons are pressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

⑧ MEMORY button

When the unit is in the frequency display mode, pressing this button will result in the memorization of the current broadcast band, reception frequency, CLASS and FM MPX mode.

⑨ MPX MODE selector button
Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the MONO indicator is lighted.

Auto stereo mode:
Normally leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo sound.

Monaural mode:
When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:
This button has no effect on reception of AM broadcasts.

⑩ Remote sensor window (SX-255R)

⑪ CLASS button
Use to switch between preset memory classes 1 to 3. In each class, one station can be memorized in each of the 1 to 10 stations, enabling a total of 30 stations to be memorized.

⑫ FM/AM selector button
This button is used to select either AM or FM reception.

⑬ TUNING buttons (–,+)
+: The FM or AM band is scanned in the direction of increasing frequency.
–: The opposite operation to that of the + button takes place.

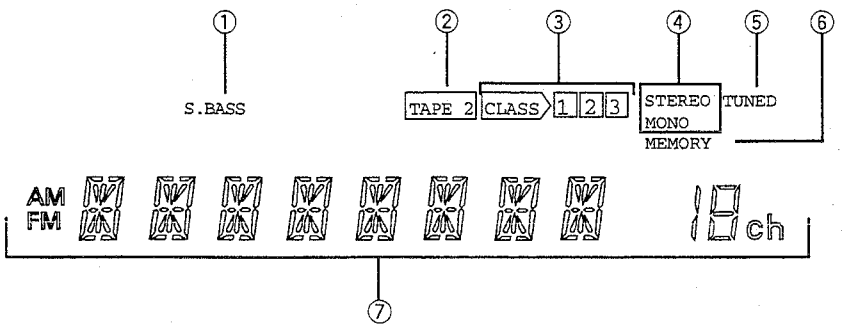
⑭ STATION buttons (–,+)
+: Stations change in order in the upward direction.
–: Stations change in order in the downward direction.

⑮ BASS tone control
Use to adjust low-frequency tone. The center position is the flat (normal) position. When turned to the right, low-frequency tones are emphasized.

⑯ TREBLE tone control
Use to adjust high-frequency tone. The center position is the flat (normal) position. When turned to the right, high-frequency tones are emphasized.

⑰ BALANCE control
Should normally be left in the center position. Adjust balance if the sound is louder from one of the speakers. If the right side is louder, turn toward the L position and if the left side is louder, turn toward the R position.

DISPLAY section



① S.BASS indicator
Lights up when the SUPER BASS button is pressed.

② TAPE 2 monitor indicator
Lights up when the function buttons is set to TAPE 2 MONITOR on.

③ CLASS 1 2 3 indicator
Indicates the class selected by the CLASS buton. The current CLASS is displayed.

④ STEREO/MONO indicator
MONO: Lights up when the FM MONO mode is selected with the MPX MODE button.
STEREO: Lights up when a stereo FM broadcast is being received.

⑤ TUNED indicator
Lights up when a station is tuned.

⑥ MEMORY indicator

⑦ Character indicator